



COMBINED SAFETY DATA SHEET

Contents

GlassCast 3 Resin	1
GlassCast 3 Hardener	14
CULR Super White	25
CULR Jet Black	46
CULR Fuchsia Pink	67
CULR Polished Gold	88



Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878 Reference number: EP-GC

Reference number: EP-GC Issue date: 24/07/2014 Revision date: 11/01/2021 Supersedes version of: 05/11/2015 Version: 1.3

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form : Mixture

Product name : GlassCast 3 Clear Epoxy Surface Resin

Type of product : Resin

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.2.1. Relevant identified uses

Intended for general public

Main use category : Industrial use

Industrial/Professional use spec : Intended for general public

Industrial

Use of the substance/mixture : Industrial laminating resin, casting, injection, winding, infusion, gluing, foaming, coatings

and sealants.

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Easy Composites Ltd
Unit 39, Park Hall Business Village, Stoke on Trent,
Staffordshire, ST3 5XA. United Kingdom.
T +44 (0) 1782 454499 (08:00 - 17:30hrs, Mon-Fri) sales@easycomposites.co.uk
www.easycomposites.co.uk

1.4. Emergency telephone number

Emergency number 44 (0) 1782 454499 (08:00 - 17:30hrs, Mon-Fri)

Country	Organisation/Company	Address	Emergency number	Comment
United Kingdom	National Poisons Information Service Edinburgh Royal Infirmary of Edinburgh	Little France Crescent EH16 4SA Edinburgh	0344 892 0111	
United Kingdom	Guy's & St Thomas' Poisons Unit Medical Toxicology Unit, Guy's & St Thomas' Hospital Trust	Avonley Road SE14 5ER London	+44 20 7188 7188	

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Skin corrosion/irritation, Category 1, Sub-Category 1B H314
Skin sensitisation, Category 1 H317
Reproductive toxicity, Category 2 H361
Hazardous to the aquatic environment — Acute Hazard, Category 1 H400
Hazardous to the aquatic environment — Chronic Hazard, Category 1 H410

Full text of H statements : see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)



Signal word (CLP) : Danger

Contains : reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular

weight ≤ 700); Formaldehyde, polymer with (chloromethyl)oxirane and phenol; 4-

nonylphenol, branched; C13/C15-Alkylglycidylether

Hazard statements (CLP) : H314 - Causes severe skin burns and eye damage.

H317 - May cause an allergic skin reaction.

H361 - Suspected of damaging fertility. Suspected of damaging the unborn child..

H410 - Very toxic to aquatic life with long lasting effects.

Precautionary statements (CLP) : P102 - Keep out of reach of children.

P270 - Do not eat, drink or smoke when using this product.
P280 - Wear protective gloves, protective clothing, eye protection.

P301+P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. P303+P361+P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated

clothing. Rinse skin with water/shower.

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing.

P501 - Dispose of contents/container to hazardous or special waste collection point, in

accordance with local, regional, national and/or international regulation..

EUH-statements : EUH205 - Contains epoxy constituents. May produce an allergic reaction.

2.3. Other hazards

Other hazards which do not result in classification : None under normal conditions. This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

Component		
Formaldehyde, polymer with (chloromethyl)oxirane and phenol (9003-36-5)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII	
4-nonylphenol, branched (84852-15-3)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII	
Component		
4-nonylphenol, branched(84852-15-3)	The substance is not included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605	

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight ≤ 700)	(CAS-No.) 25068-38-6 (EC-No.) 500-033-5 (EC Index-No.) 603-074-00-8 (REACH-no) 01-2119456619-26	40 – 80	Eye Irrit. 2, H319 Skin Irrit. 2, H315 Skin Sens. 1, H317 Aquatic Chronic 2, H411
Formaldehyde, polymer with (chloromethyl)oxirane and phenol	(CAS-No.) 9003-36-5 (EC-No.) 500-006-8 (REACH-no) 01-2119454392-40	10 – 40	Skin Irrit. 2, H315 Skin Sens. 1, H317 Aquatic Chronic 2, H411 Eye Irrit. 2, H319
C13/C15-Alkylglycidylether	(CAS-No.) 68081-84-5 (EC-No.) 268-358-2 (REACH-no) 01-2119962192-39	1 – 20	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 Aquatic Chronic 2, H411
4-nonylphenol, branched substance listed as REACH Candidate (4-Nonylphenol, branched and linear [substances with a linear and/or branched alkyl chain with a carbon number of 9 covalently bound in position 4 to phenol, covering also UVCB- and well-defined substances which include any of the individual isomers or a combination thereof]) substance listed in REACH Annex XIV (4-Nonylphenol, branched and linear, ethoxylated (substances with a linear and/or branched alkyl chain with a carbon number of 9 covalently bound in position 4 to phenol, ethoxylated covering UVCB- and well-defined substances, polymers and homologues, which include any of the individual isomers and/or combinations thereof))	(CAS-No.) 84852-15-3 (EC-No.) 284-325-5 (EC Index-No.) 601-053-00-8 (REACH-no) 01-2119510715-45	1 – 10	Acute Tox. 4 (Oral), H302 (ATE=1412 mg/kg de poids corporel) Skin Corr. 1B, H314 Eye Dam. 1, H318 Repr. 2, H361fd Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410 (M=10)

Specific concentration limits:		
Name	Product identifier	Specific concentration limits
reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight ≤ 700)	(CAS-No.) 25068-38-6 (EC-No.) 500-033-5 (EC Index-No.) 603-074-00-8 (REACH-no) 01-2119456619-26	(5 ≤C < 100) Skin Irrit. 2, H315 (5 ≤C < 100) Eye Irrit. 2, H319

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general

: IF exposed or concerned: Get medical advice/attention.

First-aid measures after inhalation

: Allow the victim to rest. Allow affected person to breathe fresh air. Give oxygen or artificial respiration if necessary. If breathing stops, give artificial respiration. Call a POISON CENTER/doctor.

First-aid measures after skin contact

Take off contaminated clothes, wash skin with plenty of water or have a shower (during minimum 15 minutes) and if necessary take medical advice. Be careful, the product may remain trapped under clothing, footwear or a wrist-watch. Do not use solvents or thinners. If on skin and if skin irritation or rash occurs, seek medical advice and attention.

First-aid measures after eye contact

: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Consult an eye specialist immediately.

First-aid measures after ingestion

: Do NOT induce vomiting. Rinse mouth. Immediately call a POISON CENTER/doctor.

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects after inhalation : May cause irritation to the respiratory tract, sneezing, coughing, burning sensation of throat

with constricting sensation of the larynx and difficulty in breathing.

Symptoms/effects after skin contact : Causes skin irritation. May cause moderate irritation. This material or its emissions may

induce an allergic or sensitization reaction and thereby aggravate existing systemic disease.

Symptoms/effects after eye contact : Causes eye irritation. May cause moderate irritation, including burning sensation, tearing,

redness or swelling.

4.3. Indication of any immediate medical attention and special treatment needed

For the Anti-poison Center indicate all the components including the non dangerous ones to obtain (when possible) a total of 100 %.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Carbon dioxide. Water spray. Dry powder. Alcohol resistant foam.

Unsuitable extinguishing media Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Explosion hazard : Heat may cause pressure rise with explosion of tanks/drums.

Hazardous decomposition products in case of fire : Carbon dioxide. Carbon monoxide. Nitrogen oxides. Toxic fumes.

5.3. Advice for firefighters

Firefighting instructions : Evacuate the danger area. Exercise caution when fighting any chemical fire. Use water

spray or fog for cooling exposed containers. Toxic to aquatic organisms, may cause long-

term adverse effects in the aquatic environment.

Protection during firefighting Do not enter fire area without proper protective equipment, including respiratory protection.

Other information Exercise caution when fighting any chemical fire.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Protective equipment : Manipulations are to be done only by qualified and authorised persons. Wear recommended

personal protective equipment.

: If a major spill occurs, all personnel should be immediately evacuated and the area **Emergency procedures**

ventilated.

6.1.2. For emergency responders

Protective equipment : Spill should be handled by trained cleaning personnel properly equipped with respiratory

and eye protection. Wear proper protective equipment.

Emergency procedures Stop release. Place in an appropriate container and dispose of the contaminated material at

a licensed site.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Avoid release to the environment. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Clean up any spills as soon as possible, using an absorbent material to collect it. Small quantities of liquid spill: take up in non-combustible absorbent material and shovel into container for disposal.

6.4. Reference to other sections

Concerning personal protective equipment to use, see section 8. Concerning disposal elimination after cleaning, see section 13.

11/01/2021 (Revision date) GB - en 4/13

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Use only outdoors or in a well-ventilated area. Do not get in eyes, on skin, or on clothing. Do

not handle until all safety precautions have been read and understood.

Hygiene measures : Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this

product. Wash hands and other exposed areas with mild soap and water before eating,

drinking or smoking and when leaving work.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store, if possible, in a cool, well ventilated place away from incompatible materials. Keep

container closed when not in use.

Incompatible products : Oxidizing agent. Strong bases. Strong acids.

Storage area : Store in a well-ventilated place. Special rules on packaging : Store in a closed container.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

No additional information available

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

No additional information available

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

No additional information available

8.2.2. Personal protection equipment

Personal protective equipment:

Avoid all unnecessary exposure. Gas mask. Protective clothing. In case of splash hazard: safety glasses. Gloves. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

Personal protective equipment symbol(s):







8.2.2.1. Eye and face protection

Eye protection:

Chemical goggles or face shield

8.2.2.2. Skin protection

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

Skin and body protection:

Wear suitable protective clothing

Hand protection:

Nitrile-rubber protective gloves. Chemical resistant gloves (according to European standard NF EN 374 or equivalent)

8.2.2.3. Respiratory protection

Respiratory protection:

[In case of inadequate ventilation] wear respiratory protection. Gas mask with filter type A

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Consumer exposure controls:

Avoid contact during pregnancy/while nursing.

Other information:

Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid

Colour : colourless to slightly yellow.

Appearance : Liquid. Odour : slight. Odour threshold : Not available Melting point : Not available Freezing point : Not available Boiling point : Not available Flammability : Not available Explosive limits : Not available Lower explosive limit (LEL) : Not available Upper explosive limit (UEL) : Not available Flash point : Not available Auto-ignition temperature : Not available Decomposition temperature : Not available : Not available Viscosity, kinematic : Not available : Not available Solubility Partition coefficient n-octanol/water (Log Kow) : Not available Vapour pressure : Not available

Vapour pressure at 50 °C : Not available Density : 1.15 Relative density : 1.15 Relative vapour density at 20 °C : Not available Particle size : Not applicable Particle size distribution : Not applicable : Not applicable Particle shape : Not applicable Particle aspect ratio Particle aggregation state : Not applicable : Not applicable Particle agglomeration state Particle specific surface area : Not applicable Particle dustiness : Not applicable

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reactions known under normal conditions of use.

10.2. Chemical stability

Stable in use and storage conditions as recommended in item 7.

10.3. Possibility of hazardous reactions

Refer to section 10.1 on Reactivity.

10.4. Conditions to avoid

No data available.

10.5. Incompatible materials

Strong acids. Oxidizing agent. Strong bases. Amines.

10.6. Hazardous decomposition products

Carbon dioxide. Carbon monoxide. Nitrogen oxides. Toxic fumes.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight ≤ 700) (25068-38-6)	
LD50 oral rat	11400 mg/kg
LD50 oral	≈ 2000 mg/kg
LD50 dermal rabbit	> 2000 mg/kg

Formaldehyde, polymer with (chloromethyl)oxirane and phenol (9003-36-5)	
LD50 oral rat	> 2000 mg/kg
LD50 dermal rabbit	> 2000 mg/kg

4-nonylphenol, branched (84852-15-3)	
LD50 oral rat	1412 mg/kg
LD50 dermal rabbit	2031 mg/kg

C13/C15-Alkylglycidylether (68081-84-5)	
LD50 oral rat	> 5000 mg/kg

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

Skin corrosion/irritation : Causes severe skin burns.

Serious eye damage/irritation : Assumed to cause serious eye damage Respiratory or skin sensitisation : May cause an allergic skin reaction.

Germ cell mutagenicity : Not classified Carcinogenicity : Not classified

Reproductive toxicity : Suspected of damaging fertility. Suspected of damaging the unborn child...

STOT-single exposure : Not classified

STOT-repeated exposure : Not classified

Aspiration hazard : Not classified

11.2. Information on other hazards

No additional information available

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : No data.
Ecology - air : No data.
Ecology - water : No data.

Hazardous to the aquatic environment, short-term

acute)

: Very toxic to aquatic life.

Hazardous to the aquatic environment, long-term

(chronic)

: Very toxic to aquatic life with long lasting effects.

reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight ≤ 700) (25068-38-6)	
LC50 - Fish [1]	1.3 mg/l
EC50 - Crustacea [1]	2.1 mg/l
EC50 72h - Algae [1]	11 mg/l

Formaldehyde, polymer with (chloromethyl)oxirane and phenol (9003-36-5)	
LC50 - Fish [1]	2.54 mg/l
EC50 - Crustacea [1]	2.55 mg/l
EC50 72h - Algae [1]	> 1000 mg/l

4-nonylphenol, branched (84852-15-3)	
LC50 - Fish [1]	0.05 mg/l
EC50 - Crustacea [1]	0.085 mg/l

12.2. Persistence and degradability

VLC A		
	Persistence and degradability	No data.

4-nonylphenol, branched (84852-15-3)	
Biodegradation	100 %

C13/C15-Alkylglycidylether (68081-84-5)	
Persistence and degradability	No data.

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

12.3. Bioaccumulative potential

VLC A	
Bioaccumulative potential	No data.

-nonylphenol, branched (84852-15-3)	
Partition coefficient n-octanol/water (Log Pow)	5.4
Partition coefficient n-octanol/water (Log Kow)	5.4

13/C15-Alkylglycidylether (68081-84-5)	
Bioaccumulative potential	No data.

12.4. Mobility in soil

VLC A	
Ecology - soil	No data.

C13/C15-Alkylglycidylether (68081-84-5)	
Ecology - soil	No data.

12.5. Results of PBT and vPvB assessment

VLC A

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

Component	
Formaldehyde, polymer with (chloromethyl)oxirane and phenol (9003-36-5)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
4-nonylphenol, branched (84852-15-3)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

12.6. Endocrine disrupting properties

No additional information available

12.7. Other adverse effects

Other adverse effects : No data

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : Do not flush down sewers. Dispose of this material and its container at hazardous or special waste collection point.

Product/Packaging disposal recommendations : Recycle or dispose of in compliance with current legislation.

Ecology - waste materials : Avoid release to the environment.

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

11/01/2021 (Revision date) GB - en 9/13

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

ADR	IMDG	IATA	ADN	RID
14.1. UN number or ID r	number			
UN 3082	UN 3082	UN 3082	UN 3082	UN 3082
14.2. UN proper shippin	g name			
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.	Environmentally hazardous substance, liquid, n.o.s.	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Transport document descr	ription			
UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight ≤ 700); Formaldehyde, polymer with (chloromethyl)oxirane and phenol), 9, III, (-)	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight ≤ 700); Formaldehyde, polymer with (chloromethyl)oxirane and phenol), 9, III, MARINE POLLUTANT	UN 3082 Environmentally hazardous substance, liquid, n.o.s. (reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight ≤ 700); Formaldehyde, polymer with (chloromethyl)oxirane and phenol), 9, III	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight ≤ 700); Formaldehyde, polymer with (chloromethyl)oxirane and phenol), 9, III	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight ≤ 700); Formaldehyde, polymer with (chloromethyl)oxirane and phenol), 9, III
14.3. Transport hazard	class(es)			
9	9	9	9	9
•	**************************************			
14.4. Packing group	,			
III	III	III	III	III
14.5. Environmental hazards				
Dangerous for the environment : Yes	Dangerous for the environment : Yes Marine pollutant : Yes	Dangerous for the environment : Yes	Dangerous for the environment : Yes	Dangerous for the environment : Yes
No supplementary information	on available			

14.6. Special precautions for user

Overland transport

Classification code (ADR) : M6

Special provisions (ADR) : 274, 335, 375, 601

Limited quantities (ADR) : 5I Excepted quantities (ADR) : E1

Packing instructions (ADR) : P001, IBC03, LP01, R001

Special packing provisions (ADR) : PP1
Mixed packing provisions (ADR) : MP19
Portable tank and bulk container instructions (ADR) : T4
Portable tank and bulk container special provisions : TP1, TP29

(ADR)

Tank code (ADR) : LGBV
Vehicle for tank carriage : AT
Transport category (ADR) : 3
Special provisions for carriage - Packages (ADR) : V12

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

Special provisions for carriage - Loading, unloading : CV13

and handling (ADR)

Hazard identification number (Kemler No.) : 90

Orange plates

90 3082

Tunnel restriction code (ADR) : EAC code : •3Z

Transport by sea

Special provisions (IMDG) : 274, 335, 969

Limited quantities (IMDG) : 5 L Excepted quantities (IMDG) : E1 Packing instructions (IMDG) : LP01, P001 Special packing provisions (IMDG) : PP1 IBC packing instructions (IMDG) : IBC03 Tank instructions (IMDG) : T4 Tank special provisions (IMDG) : TP2, TP29 EmS-No. (Fire) : F-A EmS-No. (Spillage) : S-F Stowage category (IMDG) : A

Air transport

PCA Excepted quantities (IATA) : E1
PCA Limited quantities (IATA) : Y964
PCA limited quantity max net quantity (IATA) : 30kgG
PCA packing instructions (IATA) : 964
PCA max net quantity (IATA) : 450L
CAO packing instructions (IATA) : 964
CAO max net quantity (IATA) : 450L

Special provisions (IATA) : A97, A158, A197

ERG code (IATA) : 9L

Inland waterway transport

Classification code (ADN) : M6

Special provisions (ADN) : 274, 335, 375, 601

Limited quantities (ADN) : 5 L

Excepted quantities (ADN) : E1

Carriage permitted (ADN) : T

Equipment required (ADN) : PP

Number of blue cones/lights (ADN) : 0

Rail transport

Classification code (RID) : M6

Special provisions (RID) : 274, 335, 375, 601

Limited quantities (RID) : 5L Excepted quantities (RID) : E1

Packing instructions (RID) : P001, IBC03, LP01, R001

Special packing provisions (RID) : PP1
Mixed packing provisions (RID) : MP19
Portable tank and bulk container instructions (RID) : T4
Portable tank and bulk container special provisions : TP1, TP29

(RID)

Tank codes for RID tanks (RID) : LGBV

Transport category (RID) : 3

Special provisions for carriage – Packages (RID) : W12

Special provisions for carriage - Loading, unloading : CW13, CW31

and handling (RID)

Colis express (express parcels) (RID) : CE8
Hazard identification number (RID) : 90

14.7. Maritime transport in bulk according to IMO instruments

IBC code : Not applicable.

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions

Contains a substance on the REACH candidate list in concentration ≥ 0.1% or with a lower specific limit: 4-Nonylphenol, branched and linear [substances with a linear and/or branched alkyl chain with a carbon number of 9 covalently bound in position 4 to phenol, covering also UVCB- and well-defined substances which include any of the individual isomers or a combination thereof] (EC 284-325-5, CAS 84852-15-3)

Contains REACH Annex XIV substances: 4-Nonylphenol, branched and linear [substances with a linear and/or branched alkyl chain with a carbon number of 9 covalently bound in position 4 to phenol, covering also UVCB- and well-defined substances which include any of the individual isomers or a combination thereof] (EC 284-325-5, CAS 84852-15-3)

Substances subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 july 2012 concerning the export and import of hazardous chemicals: Nonylphenols C6H4(OH)C9H19 (84852-15-3)

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

Not applicable

SECTION 16: Other information

Indication of changes:	
Revision - See : *.	

Data sources : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16

December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Other information : Information in this safety data sheet is based on actual knowledge in our possession and our experience.

This does not in any way excuse the user from knowing and applying all the regulations governing his activity. It is the sole responsibility of the user to take all precautions required in handling the product. It is the user's responsibility to take mentioned precaution measures and ensure that this information is complete

and sufficient for the use of this product.

Full text of H- and EUH-statements:		
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4	
Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1	
Aquatic Chronic 1	Hazardous to the aquatic environment — Chronic Hazard, Category 1	
Aquatic Chronic 2	Hazardous to the aquatic environment — Chronic Hazard, Category 2	
Eye Dam. 1	Serious eye damage/eye irritation, Category 1	
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2	
Repr. 2	Reproductive toxicity, Category 2	
Skin Corr. 1B	Skin corrosion/irritation, Category 1, Sub-Category 1B	
Skin Irrit. 2	Skin corrosion/irritation, Category 2	
Skin Sens. 1	Skin sensitisation, Category 1	
H302	Harmful if swallowed.	
H314	Causes severe skin burns and eye damage.	
H315	Causes skin irritation.	

11/01/2021 (Revision date) GB - en 12/13

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H361	Suspected of damaging fertility or the unborn child.
H361fd	Suspected of damaging fertility. Suspected of damaging the unborn child.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
EUH205	Contains epoxy constituents. May produce an allergic reaction.

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.



Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878 Reference number: VLC B-PRO

Issue date: 25/07/2014 Revision date: 15/12/2020 Supersedes version of: 25/07/2014 Version: 1.3

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form : Mixture

Product name : GlassCast 3 Epoxy Hardener For GlassCast 3

Type of product : Hardener (Crosslinker)

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.2.1. Relevant identified uses

Intended for general public

Main use category : Industrial use

Industrial/Professional use spec : Intended for general public

Industrial

Use of the substance/mixture : Laminating hardener, casting, injection, winding, infusion, gluing, foaming, coatings and

sealants.

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Easy Composites Ltd Unit 39, Park Hall Business Village, Stoke on Trent, Staffordshire, ST3 5XA. United Kingdom. T +44 (0) 1782 454499 (08:00 - 17:30hrs, Mon-Fri) sales@easycomposites.co.uk - www.easycomposites.co.uk

1.4. Emergency telephone number

Emergency number

T +44 (0) 1782 454499 (08:00 - 17:30hrs, Mon-Fri)

Country	Organisation/Company	Address	Emergency number	Comment
United Kingdom	National Poisons Information Service Edinburgh Royal Infirmary of Edinburgh	Little France Crescent EH16 4SA Edinburgh	0344 892 0111	
United Kingdom	Guy's & St Thomas' Poisons Unit Medical Toxicology Unit, Guy's & St Thomas' Hospital Trust	Avonley Road SE14 5ER London	+44 20 7188 7188	

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Acute toxicity (oral), Category 4 H302
Acute toxicity (inhalation:dust,mist) Category 4 H332
Skin corrosion/irritation, Category 1, Sub-Category 1B H314
Skin sensitisation, Category 1 H317
Hazardous to the aquatic environment — Chronic Hazard, Category 3 H412

Full text of H statements : see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)





GHS05

GHS07

Signal word (CLP)

: Danger

Contains

Propylidynetrimethanol, propoxylated, reaction products with ammonia; 3-aminomethyl-3,5,5-trimethylcyclohexylamine; 4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with 3-aminomethyl-3,5,5-

trimethylcyclohexylamine; benzyl alcohol

Hazard statements (CLP) : H302+H332 - Harmful if swallowed or if inhaled.

H314 - Causes severe skin burns and eye damage.

H317 - May cause an allergic skin reaction.

H412 - Harmful to aquatic life with long lasting effects.

Precautionary statements (CLP)

: P102 - Keep out of reach of children.

P270 - Do not eat, drink or smoke when using this product. P271 - Use only outdoors or in a well-ventilated area.

P273 - Avoid release to the environment.

P280 - Wear protective gloves, protective clothing, eye protection.

P301+P330+P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting. P304+P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position

comfortable for breathing.

 ${\tt P303+P361+P353-IF\ ON\ SKIN\ (or\ hair):\ Remove/Take\ off\ immediately\ all\ contaminated}$

clothing. Rinse skin with water/shower.

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing.

P501 - Dispose of contents/container to hazardous or special waste collection point, in

accordance with local, regional, national and/or international regulation..

2.3. Other hazards

Component	
benzyl alcohol (100-51-6)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	Classification according to Regulation (EC) No. 1272/2008 [CLP]
benzyl alcohol	(CAS-No.) 100-51-6 (EC-No.) 202-859-9 (EC Index-No.) 603-057-00-5 (REACH-no) 01-2119492630-38	Acute Tox. 4 (Oral), H302 (ATE=500 mg/kg de poids corporel) Acute Tox. 4 (Inhalation), H332 Eye Irrit. 2, H319

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

Propylidynetrimethanol, propoxylated, reaction products with ammonia	(CAS-No.) 39423-51-3 (EC-No.) 500-105-6 (REACH-no) 01- 2119556886-20	10 – 40	Acute Tox. 4 (Oral), H302 (ATE=500 mg/kg de poids corporel) Acute Tox. 4 (Dermal), H312 (ATE=1100 mg/kg de poids corporel) Eye Dam. 1, H318 Aquatic Chronic 2, H411
3-aminomethyl-3,5,5-trimethylcyclohexylamine	(CAS-No.) 2855-13-2 (EC-No.) 220-666-8 (EC Index-No.) 612-067-00-9 (REACH-no) 01-2119514687-32	10 – 40	Acute Tox. 4 (Dermal), H312 (ATE=1100 mg/kg de poids corporel) Acute Tox. 4 (Oral), H302 (ATE=500 mg/kg de poids corporel) Skin Corr. 1B, H314 Skin Sens. 1, H317 Aquatic Chronic 3, H412
4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro- 2,3-epoxypropane, reaction products with 3-aminomethyl-3,5,5-trimethylcyclohexylamine	(CAS-No.) 38294-64-3 (EC-No.) 500-101-4	1 – 10	Skin Corr. 1B, H314 Skin Sens. 1, H317 Aquatic Chronic 3, H412 Eye Dam. 1, H318 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Oral), H302

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Allow affected person to breathe fresh air. Respiratory arrest: artificial respiration or oxygen. If unconscious place in

recovery position and seek medical advice.

First-aid measures after skin contact : Wash contaminated clothing before reuse. Take off contaminated clothes, wash skin with

plenty of water or have a shower (during minimum 15 minutes) and if necessary take medical advice. If on skin and if skin irritation or rash occurs, seek medical advice and

attention.

First-aid measures after eye contact : Rinse immediately with plenty of water. Remove contact lenses, if present and easy to do.

Continue rinsing. Continue to rinse eye with clean water for 20-30 minutes, retracting

eyelids often. Consult an eye specialist if necessary.

First-aid measures after ingestion : Rinse mouth. Do not induce vomiting because of corrosive effects. Immediately call a

POISON CENTER/doctor.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects after inhalation : Cough. May cause respiratory irritation. Severe inhalation hazard.

Symptoms/effects after skin contact : May cause moderate irritation.

Symptoms/effects after eye contact : May cause moderate irritation, including burning sensation, tearing, redness or swelling.

Risk of damage to eyes.

Symptoms/effects after ingestion : May cause burns or irritation of the linings of the mouth, throat, and gastrointestinal tract.

4.3. Indication of any immediate medical attention and special treatment needed

For the Anti-poison Center indicate all the components including the non dangerous ones to obtain (when possible) a total of 100 %.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Water spray. Foam. Dry powder. Carbon dioxide.

15/12/2020 (Revision date) GB - en 3/11

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

: Do not breathe fumes from fires or vapours from decomposition.

Hazardous decomposition products in case of fire : Carbon dioxide. Carbon monoxide. Nitrogen oxides.

5.3. Advice for firefighters

Precautionary measures fire : Evacuate personnel to a safe area. Do not enter fire area without proper protective

equipment, including respiratory protection.

Firefighting instructions : Exercise caution when fighting any chemical fire. Unauthorized persons are not admitted.

Eliminate all ignition sources if safe to do so. Prevent fire fighting water from entering the

environment.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

Wear a self contained breathing apparatus. Special protective equipment for fire-fighters.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : No open flames. No smoking. Spill should be handled by trained cleaning personnel

properly equipped with respiratory and eye protection.

6.1.1. For non-emergency personnel

No additional information available

6.1.2. For emergency responders

No additional information available

6.2. Environmental precautions

Avoid release to the environment. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

: Clean up any spills as soon as possible, using an absorbent material to collect it. Do not Methods for cleaning up

allow to enter drains or water courses.

6.4. Reference to other sections

Concerning personal protective equipment to use, see section 8. Concerning disposal elimination after cleaning, see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Provide good ventilation in process area to prevent formation of vapour. Avoid all

unnecessary exposure. Do not handle until all safety precautions have been read and

understood. Keep containers closed.

Hygiene measures : Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed out of the workplace. Do not eat, drink or smoke when using this product. Wash

hands and other exposed areas with mild soap and water before eating, drinking or smoking

and when leaving work.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in original container. Store, if possible, in a cool, well ventilated place away from

incompatible materials.

Incompatible products : Strong acids. Oxidizing agent. Halogenated hydrocarbons.

Incompatible materials : Heat sources.

7.3. Specific end use(s)

No additional information available

15/12/2020 (Revision date) GB - en 4/11

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

No additional information available

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

No additional information available

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

No additional information available

8.2.2. Personal protection equipment

Personal protective equipment:

Self-contained breathing apparatus. Gloves. Gas mask. Protective clothing. Protective goggles. High gas/vapour concentration: gas mask with filter type K.

Personal protective equipment symbol(s):











8.2.2.1. Eye and face protection

No additional information available

8.2.2.2. Skin protection

No additional information available

8.2.2.3. Respiratory protection

Respiratory protection:

[In case of inadequate ventilation] wear respiratory protection. High gas/vapour concentration: gas mask with filter type K

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

No additional information available

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid
Colour : Colourless.
Odour
Odour threshold : Not available
Melting point : Not available
Freezing point : Not available
Boiling point : Not available

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

Flammability : Not available **Explosive limits** : Not available Lower explosive limit (LEL) : Not available Not available Upper explosive limit (UEL) Not available Flash point Auto-ignition temperature Not available Decomposition temperature Not available Not available рΗ Viscosity, kinematic : Not available Solubility : Not available Partition coefficient n-octanol/water (Log Kow) : Not available Vapour pressure : Not available Vapour pressure at 50 °C : Not available : 1 g/cm³ Density : 1 Relative density

Relative vapour density at 20 °C : Not available Particle size : Not applicable Particle size distribution : Not applicable Particle shape : Not applicable : Not applicable Particle aspect ratio : Not applicable Particle aggregation state Particle agglomeration state : Not applicable Particle specific surface area : Not applicable Particle dustiness : Not applicable

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Stable in use and storage conditions as recommended in item 7.

10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid

Heat. Open flame. Sparks.

10.5. Incompatible materials

Strong acids. Oxidizing agent. metals. halogenated hydrocarbons.

10.6. Hazardous decomposition products

Carbon monoxide. Carbon dioxide. Nitrogen oxides.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (oral) : Harmful if swallowed.
Acute toxicity (dermal) : Not classified

15/12/2020 (Revision date) GB - en 6/11

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

Acute toxicity (inhalation) : Harmful if inhaled.

VLC B		
ATE CLP (oral)	602.41 mg/kg bodyweight	
ATE CLP (dust,mist)	4.412 mg/l/4h	

3-aminomethyl-3,5,5-trimethylcyclohexylamine (2855-13-2)		
LD50 oral rat	1030 mg/kg	

benzyl alcohol (100-51-6)	
LD50 oral rat	1620 mg/kg
LC50 Inhalation - Rat	> 4178 mg/m³

Skin corrosion/irritation : Causes severe skin burns.

Serious eye damage/irritation : Assumed to cause serious eye damage
Respiratory or skin sensitisation : May cause an allergic skin reaction.

Corm cell mutagenisity : Net classified

Germ cell mutagenicity : Not classified Carcinogenicity : Not classified

Reproductive toxicity : Not classified

STOT-single exposure : Not classified

STOT-repeated exposure : Not classified

Aspiration hazard : Not classified

11.2. Information on other hazards

No additional information available

SECTION 12: Ecological information

12.1. Toxicity

 $\label{thm:local_equation} \mbox{Hazardous to the aquatic environment, short-term}$

: Not classified

(acute)

Hazardous to the aquatic environment, long-term

(chronic)

: Harmful to aquatic life with long lasting effects.

3-aminomethyl-3,5,5-trimethylcyclohexylamine (2855-13-2)		
LC50 - Fish [1]	110 mg/l	
EC50 - Crustacea [1]	23 mg/l	
EC50 - Other aquatic organisms [1]	37 mg/l	
EC50 72h - Algae [1]	> 50 mg/l	

benzyl alcohol (100-51-6)		
LC50 - Fish [1]	460 mg/l	
EC50 72h - Algae [1]	770 mg/l	
NOEC chronic algae	310 mg/l	

12.2. Persistence and degradability

No additional information available

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

Component	
benzyl alcohol (100-51-6)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

12.6. Endocrine disrupting properties

No additional information available

12.7. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

No additional information available

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

ADR	IMDG	IATA	ADN	RID	
14.1. UN number or ID number					
UN 2735	UN 2735	UN 2735	UN 2735	UN 2735	
14.2. UN proper shippin	g name				
AMINES, LIQUID, CORROSIVE, N.O.S.	AMINES, LIQUID, CORROSIVE, N.O.S.	Amines, liquid, corrosive, n.o.s.	AMINES, LIQUID, CORROSIVE, N.O.S.	AMINES, LIQUID, CORROSIVE, N.O.S.	
Transport document descr	iption				
UN 2735 AMINES, LIQUID, CORROSIVE, N.O.S. (3- aminomethyl-3,5,5- trimethylcyclohexylamine; benzyl alcohol), 8, III, (E)	UN 2735 AMINES, LIQUID, CORROSIVE, N.O.S. (3- aminomethyl-3,5,5- trimethylcyclohexylamine; benzyl alcohol), 8, III	UN 2735 Amines, liquid, corrosive, n.o.s. (3- aminomethyl-3,5,5- trimethylcyclohexylamine; benzyl alcohol), 8, III	UN 2735 AMINES, LIQUID, CORROSIVE, N.O.S. (3- aminomethyl-3,5,5- trimethylcyclohexylamine; benzyl alcohol), 8, III	UN 2735 AMINES, LIQUID, CORROSIVE, N.O.S. (3- aminomethyl-3,5,5- trimethylcyclohexylamine; benzyl alcohol), 8, III	
14.3. Transport hazard of	class(es)				
8	8	8	8	8	
8	B	8	8	8	
14.4. Packing group					
III	III	III	III	III	

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

14.5. Environmental hazards				
Dangerous for the environment : No	Dangerous for the environment : No Marine pollutant : No	Dangerous for the environment : No	Dangerous for the environment : No	Dangerous for the environment : No
No supplementary information	on available			

14.6. Special precautions for user

Overland transport

Classification code (ADR) : C7
Special provisions (ADR) : 274
Limited quantities (ADR) : 5I
Excepted quantities (ADR) : E1

Packing instructions (ADR) : P001, IBC03, LP01, R001

Mixed packing provisions (ADR) : MP19
Portable tank and bulk container instructions (ADR) : T7
Portable tank and bulk container special provisions : TP1, TP28

(ADR)

Tank code (ADR) : L4BN
Vehicle for tank carriage : AT
Transport category (ADR) : 3
Special provisions for carriage - Packages (ADR) : V12
Hazard identification number (Kemler No.) : 80

Orange plates

80 2735

Tunnel restriction code (ADR) : E
EAC code : 2X
APP code : B

Transport by sea

Special provisions (IMDG) : 223, 274 Limited quantities (IMDG) : 5 L Excepted quantities (IMDG) : E1 Packing instructions (IMDG) : P001, LP01 IBC packing instructions (IMDG) : IBC03 Tank instructions (IMDG) : T7 Tank special provisions (IMDG) TP1, TP28 : F-A EmS-No. (Fire) : S-B EmS-No. (Spillage) Stowage category (IMDG) : A

Segregation (IMDG) : SGG18, SG35

Properties and observations (IMDG) : Colourless to yellowish liquids or solutions with a pungent odour. Miscible with or soluble in water. When involved in a fire, evolve toxic gases. Corrosive to most metals, especially to

copper and its alloys. Reacts violently with acids. Cause burns to skin, eyes and mucous

membranes.

Air transport

PCA Excepted quantities (IATA) : E1 PCA Limited quantities (IATA) : Y841 PCA limited quantity max net quantity (IATA) : 1L PCA packing instructions (IATA) : 852 PCA max net quantity (IATA) : 5L CAO packing instructions (IATA) : 856 CAO max net quantity (IATA) 60L A3, A803 Special provisions (IATA) ERG code (IATA) 8L

Inland waterway transport

Classification code (ADN) : C7
Special provisions (ADN) : 274
Limited quantities (ADN) : 5 L
Excepted quantities (ADN) : E1

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

Equipment required (ADN) : PP, EP

Number of blue cones/lights (ADN) : 0

Rail transport

Classification code (RID) : C7
Special provisions (RID) : 274
Limited quantities (RID) : 5L
Excepted quantities (RID) : E1

Packing instructions (RID) : P001, IBC03, LP01, R001

Mixed packing provisions (RID) : MP19
Portable tank and bulk container instructions (RID) : T7
Portable tank and bulk container special provisions : TP1, TP28

(RID)

Tank codes for RID tanks (RID) : L4BN
Transport category (RID) : 3
Special provisions for carriage – Packages (RID) : W12
Colis express (express parcels) (RID) : CE8
Hazard identification number (RID) : 80

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

ndication of changes:	
Revision - See : *.	

Data sources : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16

December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Other information : Information in this safety data sheet is based on actual knowledge in our possession and our experience.

This does not in any way excuse the user from knowing and applying all the regulations governing his activity. It is the sole responsibility of the user to take all precautions required in handling the product. It is the user's responsibility to take mentioned precaution measures and ensure that this information is complete and sufficient for the use of this product.

Full text of H- and EUH-stateme	ents:
Acute Tox. 4 (Dermal)	Acute toxicity (dermal), Category 4
Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4	
, ,		
Aquatic Chronic 2	Hazardous to the aquatic environment — Chronic Hazard, Category 2	
Aquatic Chronic 3	Hazardous to the aquatic environment — Chronic Hazard, Category 3	
Eye Dam. 1	Serious eye damage/eye irritation, Category 1	
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2	
Skin Corr. 1B	Skin corrosion/irritation, Category 1, Sub-Category 1B	
Skin Sens. 1	Skin sensitisation, Category 1	
H302	Harmful if swallowed.	
H312	Harmful in contact with skin.	
H314	Causes severe skin burns and eye damage.	
H317	May cause an allergic skin reaction.	
H318	Causes serious eye damage.	
H319	Causes serious eye irritation.	
H332	Harmful if inhaled.	
H411	Toxic to aquatic life with long lasting effects.	
H412	Harmful to aquatic life with long lasting effects.	

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

SAFETY DATA SHEET



page 1/11

in acc. with Regulation (EU) No. 2015/830 Revision Date: 04/02/2019

Tradename: CULR[™] Art Pigment for Epoxy – Super White

SECTION 1: IDENTIFICATION OF SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

1.1. Product identifier

Tradename: CULR™ Art Pigment for Epoxy – Super White

Chemical

characterisation: C.I. Pigment Whitze 6 and Calciumcarbonat in aqueous dispersion,

contenting Polyglykol and 1,2-Propandiol.

1.2. Relevant identified uses of the substance or mixture and uses advised again

Relevant identified uses of the substance or mixture:

Industry sector: Industrial Performance Chemicals

Paints, lacquers and varnishes industry

Polymers industry Printing Inks Industry Colourant preparation

1.3. Details of the supplier of the safety data sheet

Easy Composites Ltd

Type of use:

Unit 39 Park Hall Business Village

Stoke on Trent, ST3 5XA. United Kingdom.

Phone: +44 (0)1782 454499 Information to substance / mixture:

Division: Technical

E-mail: technical@glasscastresin.com

1.4. Emergency telephone number

Emergency CONTACT (Office Hours) Phone: +44 (0)1782 454499

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance / mixture

Classification according CLP regulation (Regulation (EC) No. 1272/2008, as amended):

Categoryof danger	Category HazardSymbol	H-Phrases

Not a hazardous substance or mixture.

2.2. Label elements

Labelling according CLP regulation (Regulation (EC) No. 1272/2008, as amended):

Not a hazardous substance or mixture.

Additional Labelling:

EUH 208 contains mixture of: 1,2-Benzisothiazol-3(2H)-one,

mixture of: 5-chloro-2-methyl-2H-isothiazol-3-one

and 2-methyl-2H-isothiazol-3-one(3:1).

May produce an allergic reaction.
Safety data sheet available on request.

EUH210: 2.3. Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0,1 % or higher.

No hazards to be specially mentioned.

Tradename: CULR[™] Art Pigment for Epoxy – Super White page 2/11

SECTION 3: COMPOSITION / INFORMATION TO INGREDIENTS

3.1. Mixtures

Hazardous ingredients:

Alcohols, C16-18 and C18-unsaturated, ethoxylated (8 EO)

Concentration: $\geq 5.3 - \leq 12.6 \%$ CAS-Number: 68920-66-1 EC-Number: 500-236-9

GHS classification EC:

Skin irritation	Category 2	H315	
Acute aquatic toxicity	Category 1	H400	
Chronic aquatic toxicity	Category 3	H412	
M-Factor (Acute aquatic toxicity)			

1,2-Benzisothiazolin-3-on

Concentration: $\geq 0,0025 - \leq 0,025 \%$

CAS-Number: 2634-33-5 EC-Number: 220-120-9 INDEX-No.: 613-088-00-6 Registrationnumber: 01-2120761540-60

GHS classification EC:

Acute toxicity	Category 4	H302
Fatal ifinhaled	Category 2	H330
Skin irritation	Category 2	H315
May cause an alergic skin reaction	Category 1	H317
Serious eye damage	Category 1	H318
Acute aquatic toxicity	Category 1	H400
Chronic aquatic toxicity	Category 2	H411

Mixture of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one(3:1)

Concentration: $\geq 0.0002 - \leq 0.0015 \%$

CAS-Number: 55965-84-9
EC-Number: 611-341-5
INDEX-No.: 613-167-005
Registrationnumber: 01-2120764691-48

GHS classification EC:

Acute toxicity	Category 3	H301
Acute toxocity	Category 2	H310
Fatal ifinhaled	Category 2	H330
Causes severe skin burns and eye d.	Category 1B	H314
May cause an alergic skin reaction	Category 1	H317
Acute aquatic toxicity	Category 1	H400
Chronic aquatic toxicity	Category1	H410

The text of H-phrases is shown in section 16.

SECTION 4: FIRST AID MEASURES

4.1. Discription of first aid measures

General information:

Get medical advice/ attention if you feel unwell.

After inhalation:

Move the victim to fresh air.

If you feel unwell, seek medical advice (show the label where possible).

Tradename: CULR[™] Art Pigment for Epoxy – Super White

page 3/11

After contact with skin:

In case of contact with skin, clean with plenty of soap and water.

After contact with eyes:

In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

After ingestion:

If swallowed, seek medical advice immediately and show this container or label.

4.2. Most important symptoms and effects, both acute and delayed symptoms

Symptoms:

None known.

Hazards:

None known.

4.3. Indication of any immediate medical attention and special treatment needed

Treatment:

Treat symptomatically.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media:

Water spray jet

Dry powder

Carbon dioxide (CO₂)

Alcohol resistant foam

Extinguishing media that must not be used for safety reasons:

High volume water jet

5.2. Special hazards arising from the substance or mixture

In case of fires, hazardous combustion gases are formed:

Carbon oxides (CO_x)

Nitrogen oxides (NOx)

5.3. Advice for firefighters

Special protective equipment for firefighting:

Use self-contained breathing apparatus.

Further information:

Wear suitable protective equipment.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Wear suitable personal protective equipment.

6.2. Environment precautions

The product should not be allowed to enter drains, water courses or the soil.

6.3. Methods and material for containment and cleaning up

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).

Treat recovered material as described in the section "Disposal considerations".

6.4. Reference to other sections

Additional information:

Information regarding safe handling, see chapter 7.

Tradename: CULR[™] Art Pigment for Epoxy – Super White page 4/11

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Advice on safe handling:

When used and handled appropriately no special measures are needed.

Hygiene measures:

Wash hands before breaks and at the end of workday.

Use protective skin cream before handling the product.

Take off immediately all contaminated clothing and wash it before reuse.

Advice on protection against fire and explosion:

Normal measures for preventive fire protection.

7.2. Conditions for safe storage, including any incompatibilities

Further information on storage conditions:

Keep containers tightly closed in a cool, well-ventilated place.

Handle and open container with care.

Keep away from flames and sparks.

Storage stability:

Minimum 36 months.

7.3. Specific end use(s)

No further recommendations.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1. Control parameters

Exposure limit values:

Exposure limit values are not available.

DNEL / DMEL-values:

C.I. Pigment White 6

EC-Number: 236-675-5 CAS-Number: 13463-67-7

Route of exposure	End use	Potential health effects	Value	Remarks
Inhalation	Workers	Long-term local effects	10 mg/m ³	DNEL
Oral	Consumers	Long-term systemic effects	700 mg/kg bw/day	DNEL

1,2-Benzisothiazol-3(2H)-one EC-Number: 220-120-9 CAS-Number: 2634-33-5

Route of exposure	End use	Potential health effects	Value	Remarks
Inhalation	Workers	Long-term systemic effects	6,81 mg/m ³	DNEL
Dermal	Workers	Long-term systemic effects	0,966 mg/kg bw/day	DNEL
Inhalation	Consumers	Long-term systemic effects	1,2 mg/m ³	DNEL
Dermal	Consumers	Long-term systemic effects	0,345 mg/kg bw/day	DNEL

Tradename: CULR[™] Art Pigment for Epoxy – Super White page 5/11

Amorphous silicon dioxide EC-Number: 231-545-4 CAS-Number: 7631-86-9

Route of exposure	End use	Potential health effects	Value	Remarks
Inhalation	Workers	Long-term local effects	4 mg/m ³	DNEL

Propylene Glycol

EC-Number: 200-338-0 CAS-Number: 57-55-6

Route of exposure	End use	Potential health effects	Value	Remarks
Inhalation	Workers	Long-term systemic effects	168 mg/m ³	DNEL
Inhalation	Workers	Long-term local effects	10 mg/m ³	DNEL
Inhalation	Consumers	Long-term systemic effects	50 mg/m ³	DNEL
Inhalation	Consumers	Long-term local effects	10 mg/m ³	DNEL
Skin contact	Consumers	Long-term systemic effects	213 mg/m ³	
Ingestion	Consumers	Long-term systemic effects	85 mg/m ³	

PNEC-values:

C.I. Pigment White 6

EC-Number: 236-675-5 CAS-Number: 13463-67-7

Environmental compartment	Value
Fresh water	0,184 mg/l
Fresh water sediment	1000 mg/kg dry weight (d.w.)
Marine water	0,0184 mg/l
Marine sediment	100 mg/kg dry weight (d.w.)
Soil	100 mg/kg dry weight (d.w.)
Sewage treatment plant	100 mg/l
Water (intermittent release)	0,193 mg/l

Propylene Glycol

EC-Number: 200-338-0 CAS-Number: 57-55-6

Environmental compartment	Value
Fresh water	260 mg/l
Marine water	26 mg/l
Water (intermittent release)	183 mg/l
Sewage treatment plant	20000 mg/l
Fresh water sediment	572 mg/kg dry weight (d.w.)
Marine sediment	57,2 mg/kg dry weight (d.w.)
Soil	50 mg/kg dry weight (d.w.)

1,2-Benzisothiazol-3(2H)-one EC-Number: 220-120-9 CAS-Number: 2634-33-5

Environmental compartment	Value
Fresh water	0,00403 mg/l
Marine water	0,000403 mg/l
Intermittend use/release	0,0011 mg/l

Tradename: CULR[™] Art Pigment for Epoxy – Super White

Sewage treatment plant1,03 mg/lFresh water sediment0,0499 mg/kg dry weight (d.w.)Marine sediment0,00499 mg/kg dry weight (d.w.)Soil3 mg/kg dry weight (d.w.)

page 6/11

Mixture of: 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)

EC-Number: 611-341-5 CAS-Number: 55965-84-9

Environmental compartment	Value
Fresh water	0,049 µg/l
Marine water	0,0098 µg/l
Sewage treatment plant	0,045 μg/l
Soil	0,009 µg/l

8.2. Exposure controls

Appropriate engineering controls:

Handle only in a place equipped with local exhaust (or other appropriate exhaust).

General protective measures:

Wear suitable protective equipment.

Respiratory protection:

When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

Hand protection:

Nitrile rubber

Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact).

Eye protection:

Safety glasses

Body protection:

Wear suitable protective equipment.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical state: liquid
Form: liquid
Colour: white
Odour: not significant

Odour threshold: not required pH value: not measured Melting point: not applicable Boiling point: approx. 100 °C > 100 °C Flash point: Evaporation rate: not determined Flammability: not determined Lower explosion limit: not determined Upper explosive limit: not determined Combustion number: not applicable Minimum ignition energy: not determined

Vapour pressure: not determined
Vapour density relative to air: not determined
Relative Density: no data available

Solubility in water: miscible

Octanol/ water partition

coefficient (log Pow): not determined

page 7/11

Tradename: CULR[™] Art Pigment for Epoxy – Super White

Ignition temperature: not determined
Thermal decomposition: > 100 °C
Viscosity (dynamic): not tested

Oxidizing properties: no data available

9.2. Other information

Density: 1,80 g/cm³ (20 °C)

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

No dangerous reaction known under conditions of normal use.

10.2. Chemical Stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reaction known under conditions of normal use. Stable.

10.4. Conditions to avoid

None known.

10.5. Incompatible Materials

No data available.

10.6. Hazardous decomposition products

No decomposition if stored and applied as directed.

SECTION 11: TOXICOLOGIC INFORMATION

11.1. Information on toxicological effects Acute toxicity

Informations related to the product:

Acute oral toxicity: Remarks: no data available Acute inhalation toxicity: Remarks: no data available

Acute dermal toxicity: Acute toxicity estimate: > 2.000 mg/kg

Method: Calculation method

Informations related to the component 1,2-Benzisothiazol-3(2H)-one:

Acute oral toxicity: LD50 (Rat, male and female): 670 - 784 mg/kg

Method: OECD Test Guideline 401

GLP: yes

Acute inhalation toxicity: LC50 (Rat, male and female): 0,5 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist Method: OPPTS 870.1300

GLP: yes

Acute dermal toxicity: LD50 (Rat, male and female): > 2.000 mg/kg

GLP: yes

Assessment: The substance or mixture has no acute

dermal toxicity.

Informations related to the component mixture of: 5-chloro-2-methyl-2H-isothiazol-3-one and

2-methyl-2H-isothiazol-3-one (3:1):

Acute oral toxicity: LD50 (Rat): 64 mg/kg

Acute inhalation toxicity: LC50 (Rat, male and female): 0,171 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Acute dermal toxicity: LD50 (Rabbit): 92,4 mg/kg

Tradename: CULR[™] Art Pigment for Epoxy – Super White

Skin corrosion/irritation

Informations related to the product:

Species: EPISKIN Human Skin Model Test

Method: OECD Test Guideline 439

Result: No skin irritation

Remarks: The toxicological data has been taken

page 8/11

from products of similar composition.

Species: Rabbit

Method: OECD Test Guideline 404

Result: No skin irritation

Remarks: The toxicological data has been taken

from products of similar composition.

Informations related to the component Alcohols, C16-18 and C18-unsaturated, ethoxylated:

Result: Irritating to skin.

<u>Informations related to the component 1,2-Benzisothiazol-3(2H)-one:</u>

Species: Rabbit

Exposure time: 4 h Result: Irritating to skin.

GLP:yes

Informations related to the component mixture of: 5-chloro-2-methyl-2H-isothiazol-3-one and

2-methyl-2H-isothiazol-3-one(3:1):

Species: Rabbit

Result: Causes burns.

Serious eye damage/eye irritation

Informations related to the product:

Species: Bovine cornea

Method: OECD Test Guideline 437

Result: No eye irritation

Remarks: The toxicological data has been taken

from products of similar composition.

Species: rabbit eye

Method: OECD Test Guideline 405

Result: No eye irritation

Remarks: The toxicological data has been taken

from products of similar composition.

<u>Informations related to the component 1,2-Benzisothiazol-3(2H)-one:</u>

Species: rabbit eye

Exposure time: 2,9 h - 11 d

Result: Risk of serious damage to eyes.

GLP: yes

Informations related to the component mixture of: 5-chloro-2-methyl-2H-isothiazol-3-one and

2-methyl-2H-isothiazol-3-one(3:1):

Species: rabbit eye

Result: Risk of serious damage to eyes.

Respiratory or skin sensitisation

Informations related to the product:

Remarks: no data available

<u>Informations related to the component 1,2-Benzisothiazol-3(2H)-one:</u>

Test Type: Guinea pig maximization test

Exposure routes: Dermal

Species: Guinea pig

Method: Other

Tradename: CULR[™] Art Pigment for Epoxy – Super White

ResulT: May cause sensitisation by skin contact.

page 9/11

GLP: yes

Informations related to the component mixture of: 5-chloro-2-methyl-2H-isothiazol-3-one and 2-

methyl-2H-isothiazol-3-one(3:1):

Species: Guinea pig

Method: Other

Result: The product is a skin sensitiser,

sub-category 1A.

Assessment: Toxic if swallowed, Fatal in contact with skin,

Fatal ifinhaled,

Causes severe skin burns and eye damage.

May cause an allergic skin reaction.

Germ cell mutagenicity

Informations related to the product:

Genotoxicity in vitro: Remarks: no data available

Germ cell mutagenicity-

Assessment: No information available.

Informations related to the component 1,2-Benzisothiazol-3(2H)-one:

Genotoxicity in vitro: Test Type: Mouse lymphoma assay

Test system: mouse lymphoma cells Concentration: 0,1 - 12,8 µg/ml

Metabolic activation:

with and without metabolic

activation: Method: OECD Test Guideline 476

Result: negative GLP: yes

Test Type: Ames test

Test system: Salmonella typhimurium Concentration: 0,064 - 200 µg/plate

Metabolic activation:

with and without metabolic

activation: Method: OECD Test Guideline 471

Result: negative

GLP: yes

Test Type: Chromosome aberration test in vitro

Test system: Human lymphocytes Concentration: 1 - 40 µg/ml

Metabolic activation:

with and without metabolic

activation: Method: OECD Test Guideline 473

Result: positive GLP: yes

Genotoxicity in vivo: Test Type: Other

Species: Rat (male) Strain: wistar

Cell type: Liver cells

Application Route: Ingestion Exposure time: single dose Dose: 560 - 1400 mg/kg

Method: OECD Test Guideline 486

Result: negative

GLP: yes

Test Type: Micronucleus test Species: Mouse (male and female)

Strain: CD1

Tradename: CULR[™] Art Pigment for Epoxy – Super White

Cell type: Bone marrow Application Route: Ingestion Exposure time: single dose

Dose: 125-250-500-1000-2000-5000mg/kg

page 10/11

Method: OECD Test Guideline 474

Result: negative GLP: yes

Germ cell mutagenicity-

Assessment: Did not show mutagenic effects in animal experiments.

Informations related to the component mixture of: 5-chloro-2-methyl-2H-isothiazol-3-one and

2-methyl-2H-isothiazol-3-one(3:1):

Genotoxicity in vitro: Test Type: In vitro study

Metabolic activation:

with and without metabolic

activation: Result: Conflicting results have been seen in different

studies.

Genotoxicity in vivo: Test Type: Micronucleus test

Species: Rat

Cell type: Bone marrow Application Route: Oral Exposure time: ≤ 5 d Dose: 1-5 x ≤ 28 mg/kg

Result: negative

Test Type: Micronucleus test

Species: Mouse Application Route: Oral Exposure time: ≤ 5 d Dose: 1-5 x ≤ 20 - 30 mg/kg

Result: negative

Germ cell mutagenicity-

Assessment: In vivo tests did not show mutagenic effects

Carcinogenicity

Informations related to the product:

Carcinogenicity -

Assessment: No information available.

Informations related to the component 1,2-Benzisothiazol-3(2H)-one:

Carcinogenicity -

Assessment: Not applicable

<u>Informations related to the component mixture of: 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one(3:1):</u>

Carcinogenicity -

Assessment: No evidence of carcinogenicity in animal studies.

Reproductive toxicity

Informations related to the product:

Reproductive toxicity -

Assessment: No information available.

Informations related to the component 1,2-Benzisothiazol-3(2H)-one:

Effects on fertility: Species: Rat, male

Application Route: oral (fed) Dose: 18,5 - 97,8 mg/kg

General Toxicity - Parent: NOAEL: 18,5 mg/kg

body weight

General Toxicity F1: NOAEL: 48 mg/kg body weight

Tradename: CULR[™] Art Pigment for Epoxy – Super White

Method: Other GLP: yes

Species: Rat, female

Application Route: oral (feed) Dose: 27,0 - 114,8 mg/kg

General Toxicity - Parent: NOAEL: 27 mg/kg

body weight

General Toxicity F1: NOAEL: 56,6 mg/kg body weight

page 11/11

Method: Other GLP: yes

Effects on foetal development: Species: Rat, female

Application Route: oral (gavage) Dose: 10 - 40 - 100 mg/kg

General Toxicity Maternal: NOAEL: 10 mg/kg

body weight

Teratogenicity: NOAEL: 40 mg/kg body weight Method: Directive 67/548/EEC, Annex V, B.31.

GLP: yes

Reproductive toxicity – Assessment: No evidence of adverse effects on sexual function

and fertility, or on development, based on animal

experiments.

Embryotoxicity classification not possible from current

data.

Informations related to the component mixture of: 5-chloro-2-methyl-2H-isothiazol-3-one and

2-methyl-2H-isothiazol-3-one(3:1):

Effects on fertility: Species: Rat, male and female

Application Route: Drinking water

Dose: 25 - 75 - 225 ppm

General Toxicity - Parent: NOAEL: 16,3 - 24,7 mg/kg

body weight

General Toxicity F1: NOAEL: 16,3 - 24,7 mg/kg

body weight Method: Other GLP: yes

Species: Rat, male and female Application Route: Drinking water

Dose: 30 - 100 - 300 ppm

General Toxicity - Parent: NOAEL: 2,8 - 4,4 mg/kg

body weight

General Toxicity F1: NOAEL: 22,7 - 28 mg/kg

body weight

General Toxicity F2: NOAEL: 35,7 - 39,1 mg/kg

body weight

Method: OECD Test Guideline 416

GLP: yes

Effects on foetal development: Species: Rat, male and female

Application Route: oral (gavage)

Dose: ≤ 15 mg/kg

Developmental Toxicity: NOAEL: 15 mg/kg body weight

Method: Other

Species: Rat, male and female Application Route: oral (gavage)

General Toxicity Maternal: NOAEL: ≤ 3,95 mg/kg

body weight Method: Other

Reproductive toxicity – Assessment: Weight of evidence does not support classification for

reproductive toxicity

Tradename: CULR[™] Art Pigment for Epoxy – Super White

Embryotoxicity classification not possible from current data.

page 12/11

STOT - single exposure

Informations related to the component product:

Remarks: no data available

Informations related to the component 1,2-Benzisothiazol-3(2H)-one:

Assessment: The substance or mixture is not classified as specific

target organ toxicant, single exposure.

Informations related to the component mixture of: 5-chloro-2-methyl-2H-isothiazol-3-one and

2-methyl-2H-isothiazol-3-one(3:1):

Assessment: The substance or mixture is not classified as specific

target organ toxicant, single exposure.

STOT - repeated exposure

Informations related to the component product:

Remarks: no data available

Informations related to the component 1,2-Benzisothiazol-3(2H)-one:

Assessment: The substance or mixture is not classified as specific

target organ toxicant, repeated exposure.

Informations related to the component mixture of: 5-chloro-2-methyl-2H-isothiazol-3-one and

2-methyl-2H-isothiazol-3-one(3:1):

Assessment: The substance or mixture is not classified as specific

target organ toxicant, repeated exposure.

Repeated dose toxicity

Informations related to the product:

Remarks: This information is not available.

Informations related to the component 1,2-Benzisothiazol-3(2H)-one:

Species: Dog, male and female

NOAEL: 5 mg/kg LOAEL: 20 mg/kg

Application Route: oral (gavage)

Exposure time: 90 d Number of exposures: daily Dose: 5 - 20 - 50 mg/kg

Group: yes

Method: 88/302/EC

GLP: yes

Informations related to the component mixture of: 5-chloro-2-methyl-2H-isothiazol-3-one and

2-methyl-2H-isothiazol-3-one(3:1):

Species: Rat, male and female

NOAEL: 16,3 - 24,7 mg/kg ApplicationRoute: Drinking water

Exposure time: 90 d Number of exposures: daily Dose: 25 - 75 - 225 ppm

Group: yes Method: Other GLP: yes

Aspiration toxicity

Informations related to the product:

no data available

Tradename: CULR[™] Art Pigment for Epoxy – Super White

Informations related to the component 1,2-Benzisothiazol-3(2H)-one:

No aspiration toxicity classification

Informations related to the component mixture of: 5-chloro-2-methyl-2H-isothiazol-3-one and

2-methyl-2H-isothiazol-3-one(3:1): No aspiration toxicity classification

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity:

Informations related to the product:

Toxicity to fish: Remarks: no data available

Toxicity to daphnia and other

aquatic invertebrates: Remarks: no data available Remarks: no data available

Informations related to the component Alcohols, C16-18 and C18-unsaturated, ethoxylated:

M-Factor

(Acute aquatic toxicity): 1

Ecotoxicology Assessment

Acute aquatic toxicity: Very toxic to aquatic life.

Chronic aquatic toxicity: Harmful to aquatic life with long lasting effects.

<u>Informations related to the component 1,2-Benzisothiazol-3(2H)-one:</u>

Toxicity to fish: LC50 (Oncorhynchus mykiss (rainbow trout)): 2,18 mg/l

Exposure time: 96 h
Test Type: static test
Analytical monitoring: yes

Method: OECD Test Guideline 203

GLP: yes

LC50 (Cyprinodon variegatus (sheepshead minnow)):

page 13/11

approx.16,7 mg/l Exposure time: 96 h Test Type: static test Analytical monitoring: yes

Method: No information available.

GLP: yes

Toxicity to daphnia and other aquatic invertebrates:

EC50 (Daphnia magna (Water flea)): 2,94 mg/l

Exposure time: 48 h
Test Type: static test
Analytical monitoring: yes

Method: OECD Test Guideline 202

GLP: yes

EC0 (Daphnia magna (Water flea)): 0,643 mg/l

Exposure time: 48 h
Test Type: static test
Analytical monitoring: yes

Method: OECD Test Guideline 202

GLP: yes

EC50 (Mysidopsis bahia (opossum shrimp)): 0,9893 mg/l

Exposure time: 96 h
Test Type: static test
Analytical monitoring: yes

Method: Other

Tradename: CULR[™] Art Pigment for Epoxy – Super White

GLP: yes

Remarks: salt water

NOEC (Mysidopsis bahia (opossum shrimp)): 0,25 mg/l

page 14/11

Exposure time: 96 h
Test Type: static test
Analytical monitoring: yes

Method: Other GLP: yes

Remarks: salt water

EC50 (Selenastrumc apricornutum (green algae)):

0,155 mg/l

End point: Growth rate Exposure time: 72 h Analytical monitoring: yes

Method: OECD Test Guideline 201

GLP: yes

NOEC (Selenastrum capricornutum (green algae)):

0,055 mg/l

End point: Growth rate Exposure time: 72 h Analytical monitoring: yes

Method: OECD Test Guideline 201

GLP: yes

M-Factor

Toxicity to algae:

(Acute aquatic toxicity):

Toxicity to microorganisms:

EC50 (activated sludge of a predominantly domestic

sewage): 23 mg/l

End point: Bacteria toxicity (respiration inhibition)

Exposure time: 3 h
Test Type: aquatic
Analytical monitoring: no

Method: OECD Test Guideline 209

GLP: yes

Remarks: The details of the toxic effect relate to the

nominal concentration.

EC50: > 811,5 mg/kg dry weight (d.w.)

Exposure time: 28 d Test Type: Soil

Analytical monitoring: yes Method: OECD 216

GLP: yes

Remarks: The details of the toxic effect relate to the

nominal concentration.

NOEC: 263,7 mg/kg dry weight (d.w.)

Exposure time: 28 d Test Type: Soil

Analytical monitoring: yes Method: OECD 216

GLP: yes

Remarks: The details of the toxic effect relate to the

nominal concentration.

Toxicity to fish

(Chronic toxicity): NOEC: 0,21 mg/l Exposure time: 28 d

Tradename: CULR[™] Art Pigment for Epoxy – Super White

page 15/11

Species: Oncorhynchus mykiss (rainbow trout)

Analytical monitoring: yes

Method: OECD Test Guideline 215

GLP: yes

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity):

NOEC: 1,2 mg/l

End point: Reproduction rate

Exposure time: 21 d

Species: Daphnia magna (Water flea)

Analytical monitoring: yes

Method: OECD Test Guideline 211

GLP: yes

NOEC: 1,9 mg/l

End point: Reproduction rate

Exposure time: 21 d

Species: Daphnia magna (Water flea)

Analytical monitoring: yes

Method: OECD Test Guideline 211

GLP: yes

Toxicity to soil dwelling organisms:

Test Type: artificial soil LC50: > 410,6 mg/kg Exposure time: 14 d End point: mortality

Species: Eisenia fetida (earthworms) Method: OECD Test Guideline 207

GLP:yes

Remarks: The details of the toxic effect relate to the

nominal concentration.

Test Type: artificial soil NOEC: 234,5 mg/kg Exposure time: 14 d End point: mortality

Species: Eisenia fetida (earthworms) Method: OECD Test Guideline 207

GLP:yes

Remarks: The details of the toxic effect relate to the

nominal concentration.

Plant toxicity:

EC50: 340 mg/kg Exposure time: 20 d End point: Growth

Species: Phaseolus vulgaris Analytical monitoring: yes Method: OECD Guide-line 208

GLP:yes

Remarks: The details of the toxic effect relate to the

nominal concentration.

NOEC: 90 mg/kg Exposure time: 20 d End point: Growth

Species: Phaseolus vulgaris Analytical monitoring: yes Method: OECD Guide-line 208

GLP:yes

Tradename: CULR[™] Art Pigment for Epoxy – Super White

Remarks: The details of the toxic effect relate to the

page 16/11

nominal concentration.

EC50: 300 mg/kg Exposure time: 19 d End point: Growth

Species: Triticum aestivm (wheat)

Analytical monitoring: yes Method: OECD Guide-line 208

GLP: yes

Remarks: The details of the toxic effect relate to the

nominal concentration.

NOEC: 51 mg/kg Exposure time: 19 d End point: Growth

Species: Triticum aestivm (wheat)

Analytical monitoring: yes Method: OECD Guide-line 208

GLP:yes

Remarks: The details of the toxic effect relate to the

nominal concentration.

Sediment toxicity: Remarks: not available

Ecotoxicology Assessment

Acute aquatic toxicity: Very toxic to aquatic life.

Chronic aquatic toxicity: Toxic to aquatic life with long lasting effects.

<u>Informations related to the component mixture of: 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one(3:1):</u>

Toxicity to fish: EC50 (Oncorhynchus mykiss (rainbow trout)): 0,22 mg/l

Exposure time: 96 h

Method: OECD Test Guideline 203

Toxicity to daphnia and other

aquatic invertebrates: EC50 (Daphnia magna (Water flea)): 0,1 mg/l

Exposure time: 48 h

Method: OECD Test Guideline 202

Toxicity to algae: EC50 (Skeletonema costatum (marine diatom)):

0,0052 mg/l Exposure time: 48 h Test Type: static test

Method: OECD Test Guideline 201

NOEC (Skeletonema costatum (marine diatom)):

0,00049 mg/l Exposure time: 48 h Test Type: static test

Method: OECD Test Guideline 201

M-Factor

(Acute aquatic toxicity): 100

Toxicity to microorganisms: EC50 (activated sludge): 7,92 mg/l

Exposure time: 3 h

Method: OECD Test Guideline 209

Toxicity to fish

(Chronic toxicity): NOEC: 0,098 mg/l

Exposure time: 28 d

Species: Oncorhynchus mykiss (rainbow trout)

Method: OECD Test Guideline 215

Tradename: CULR[™] Art Pigment for Epoxy – Super White

Toxicity to daphnia and other aquatic invertebrates

(Chronic toxicity): NOEC: 0,004 mg/l Exposure time: 21 d

Species: Daphnia magna (Water flea)
Method: OECD Test Guideline 202

page 17/11

M-Factor

(Chronic aquatic toxicity): 10

Toxicity to soil dwelling

organisms: LC50: 86,6 mg/kg dry weight (d.w.)

Exposure time: 14 d

Species: Eisenia fetida (earthworms) Method: OECD Test Guideline 207 NOEC: 8,83 mg/kg dry weight (d.w.)

Exposure time: 14 d

Species: Eisenia fetida (earthworms)

OECD Test Guideline 207

Ecotoxicology Assessment

Acute aquatic toxicity: Very toxic to aquatic life.

Chronic aquatic toxicity: Very toxic to aquatic life with long lasting effects.

12.2. Persistence and degradability

Informations related to the product:

Biodegradability: no data available

Informations related to the component 1,2-Benzisothiazol-3(2H)-one:

Biodegradability: Test Type: aerobic

Inoculum: activated sludge Concentration: 1 mg/l

Result: Partially biodegradable.

Exposure time: 63 d

Method: OECD Test Guideline 301C

GLP: yes

Physico-chemical removability: Remarks: Biodegradable

Stability in water:

Test Type: abiotic

Degradation half life: 219 d

pH: 4

Hvdrolvsis: at 50 °C

Method: OECD Test Guideline 111

GLP: yes

Test Type: abiotic

Degradation half life: > 200 d

pH: 7

Hydrolysis: at 50 °C

Method: OECD Test Guideline 111

GLP: yes

Test Type: abiotic

Degradation half life: 145 d

pH: 9

Hydrolysis: at 50 °C

Method: OECD Test Guideline 111

GLP: yes

Photodegradation: Test Type: water

Light source: Xenon lamp Light spectrum: 290 - 400 nm

Degradation (direct photolysis): < 1,5 %

GLP: yes

Tradename: CULR[™] Art Pigment for Epoxy – Super White

Test Type: air Method: calculated

GLP: no

Remarks: Decomposes rapidly in contact with light.

page 18/11

Informations related to the component mixture of: 5-chloro-2-methyl-2H-isothiazol-3-one and

2-methyl-2H-isothiazol-3-one(3:1):

Biodegradability: Test Type: aerobic

Inoculum: activated sludge Result: Not rapidly biodegradable Method: OECD Test Guideline 301B

Photodegradation: Test Type: water
Light source: Sunlight

12.3. Bioaccumulative potential

Informations related to the product:

Bioaccumulation: no data available

Informations related to the component 1,2-Benzisothiazol-3(2H)-one:

Bioaccumulation: Species: Lepomis macrochirus (Bluegill sunfish)

Exposure time: 56 d Concentration: 0,1 mg/l

Bioconcentration factor (BCF): 6,62 Method: OECD Test Guideline 305

GLP: no

Remarks: Due to the distribution coefficient n-octanol/water,accumulation in organisms is

not expected.

Informations related to the component mixture of: 5-chloro-2-methyl-2H-isothiazol-3-one and

2-methyl-2H-isothiazol-3-one(3:1):

Bioaccumulation: Bioconcentration factor (BCF): 3,6

Method: calculated

Remarks: Does not accumulate in organisms.

Partition coefficient

n-octanol/water: log Pow: -0,71 - 0,75

Method: OECD Test Guideline 107

12.4. Mobility in soil

Informations related to the component 1,2-Benzisothiazol-3(2H)-one:

Distribution among

environmental compartments: Adsorption/Soil

Medium: water – soil Koc: 235 – 566 Method: Other

12.5. Results of PBT and vPvB assessment

Informations related to the product:

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0,1 % or higher.

<u>Informations related to the component 1,2-Benzisothiazol-3(2H)-one:</u>

Assessment: The substance is not identified as a PBT or as a vPvB

substance.

Informations related to the component mixture of: 5-chloro-2-methyl-2H-isothiazol-3-one and

2-methyl-2H-isothiazol-3-one(3:1):

Assessment: This substance is not considered to be persistent,

bioaccumulating and toxic (PBT).

Tradename: CULR[™] Art Pigment for Epoxy – Super White

12.6. Other adverse effects

Informations related to the product:

Environmental fate and pathways: no data available Additional ecological information: no data available

<u>Informations related to the component 1,2-Benzisothiazol-3(2H)-one:</u>

Environmental fate and pathways: not available

Additional ecological information: Do not allow to enter ground water, waterways or

waste water.

Informations related to the component mixture of: 5-chloro-2-methyl-2H-isothiazol-3-one and

2-methyl-2H-isothiazol-3-one(3:1):

Additional ecological information: The product should not be allowed to enter drains,

watercourses or the soil.

page 19/11

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Product:

Dispose of in accordance with the European Directives on waste and hazardous waste.

Uncleaned packaging:

This material and its container must be disposed of in a safe way.

SECTION 14: TRANSPORT INFORMATION

14.1. to 14.5.

ADR: not restricted ADN: not restricted RID: not restricted IATA: not restricted IMDG: not restricted

14.6. Special precautions for users

See sections 6 to 8 of this Safety Data Sheet.

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

No transport as bulk according IBC-Code.

SECTION 15: REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

REACH - Candidate List of Substances of

Very High Concern for Authorisation (Article 59): Not applicable

REACH - List of substances subject to authorisation

(Annex XIV): Not applicable

Regulation (EC) No 1005/2009 on substances that

deplete the ozone layer: Not applicable

Regulation (EC) No 850/2004 on persistent

organic pollutants: Not applicable

Other regulations:

Apart from the data/regulations specified in this chapter, no further information is available concerning safety, health and environmental protection.

15.2. Chemical safety assessment

No Chemical Safety Assessment (CSA) is yet available for the substance, or for the component substances, contained in this product.

Tradename: CULR[™] Art Pigment for Epoxy – Super White page 20/11

SECTION 16: OTHER INFORMATION

Observe the legal requirements nationally and locally.

List of the text of the hazard statements mentioned section 3 (H-phrases):

H301 Toxic if swallowed.
H302 Harmful if swallowed.
H310 Fatal in contact with skin.

H314 Causes severe skin burns and eye damage.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H330 Fatal if inhaled.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.
 H411 Toxic to aquatic life with long lasting effects.
 H412 Harmful to aquatic life with long lasting effects.

Full text of other abbreviations

Acute Tox.: Acute toxicity

Aquatic Acute: Short-term (acute) aquatic hazard Aquatic Chronic: Long-term (chronic) aquatic hazard

Eye Dam.: Serious eye damage Skin Corr.: Skin corrosion Skin Irrit.: Skin sensitisation

STOT RE: Specific target organ toxicity - repeated exposure

Change compared to the previous version:

Change in the composition

Legend

ADN European Agreement concerning the International Carriage of

Dangerous Goods by Inland Waterways

ADR European Agreement concerning the International Carriage of

Dangerous Goods by Road

AICS Australian Inventory of Chemical Substances
ASTM American Society for the Testing of Materials

bw Body weight

CLP Classification Labelling Packaging Regulation

Regulation (EC) No 1272/2008

CMR Carcinogen, Mutagen or Reproductive Toxicant
DIN Standard of the German Institute for Standardisation
DMEL Derived Minimal Effect Level (genotoxic substances)

DNEL Derived No Effect Level

DSL Domestic Substances List (Canada)
ECHA European Chemicals Agency
EC-Number European Community number

ECx Concentration associated with x% response ELx Loading rate associated with x% response

EmS Emergency Schedule

ENCS Existing and New Chemical Substances (Japan)

ErCx Concentration associated with x% growth rate response

GHS Globally Harmonized System
GLP Good Laboratory Practice

IARC International Agency for Research on Cancer IATA International Air Transport Association

IBC International Code for the Construction and Equipment of Ships

carrying Dangerous Chemicals in Bulk

IC50 Half maximal inhibitory concentration ICAO International Civil Aviation Organization

page 21/11

Tradename: CULR[™] Art Pigment for Epoxy – Super White

IECSC Inventory of Existing Chemical Substances in China International Maritime Dangerous Goods **IMDG** IMO International Maritime Organization **ISHL** Industrial Safety and Health Law (Japan) International Organisation for Standardization ISO **KECI** Korea Existing Chemicals Inventory LC50 Lethal Concentration to 50 % of a test population LD50 Lethal Dose to 50% of a test population (Median Lethal Dose) **MARPOL** International Convention for the Prevention of Pollution from Ships Not Otherwise Specified n.o.s. No Observed (Adverse) Effect Concentration NO(A)EC No Observed (Adverse) Effect Level NO(A)EL **NOELR** No Observable Effect Loading Rate **NZIoC** New Zealand Inventory of Chemicals **OECD** Organization for Economic Co-operation and Development Office of Chemical Safety and Pollution Prevention **OPPTS** Persistent, Bioaccumulative and Toxic substance PBT Philippines Inventory of Chemicals and Chemical Substances **PICCS** (Quantitative) Structure Activity Relationship (Q)SAR Regulation (EC) No 1907/2006 of the European Parliament and of the **REACH** Council concerning the Registration, Evaluation, Authorisation and **Restriction of Chemicals** RID Regulations concerning the International Carriage of Dangerous Goods by Rail Self-Accelerating Decomposition Temperature SADT SDS Safety Data Sheet TCSI Taiwan Chemical Substance Inventory **TRGS** Technical Rule for Hazardous Substances Toxic Substances Control Act (United States) **TSCA United Nations** UN vPvB Very Persistent and Very Bioaccumulative

Decimal notation: "thousands" places are identified with a dot (for example, "2.000 mg/kg" means "two thousand mg/kg"). Decimal places are identified with a comma (for example, "1,35 g/cm³" means "one point three five g/cm³").

This information corresponds to the present state of our knowledge and is intended as a general description of our products and their possible applications. Easy Composites Ltd makes no warranties, express or implied, as to the information accuracy, adequacy, sufficiency or freedom from defect and assumes no liability in connection with any use of this information. Any user of this product is responsible for determining the suitability of Easy Composites Ltd products for its particular application. Nothing included in this information waives any of Easy Composites Ltd General Terms and Conditions of Sale, which control unless it agrees otherwise in writing.

Any existing intellectual/industrial property rights must be observed. Due to possible changes in our products and applicable national and international regulations and laws, the status of our products could change. Material Safety Data Sheets providing safety precautions, that should be observed when handling or storing Easy Composites Ltd products, are available upon request and are provided in compliance with applicable law. You should obtain and review the applicable Material Safety Data Sheet information before handling any of these products.

For additional information, please contact Easy Composites Ltd.

SAFETY DATA SHEET

in acc. with Regulation (EU) No. 2015/830 Revision Date: 04/02/2019

CULR[™] Art Pigment for Epoxy – Jet Black **Tradename:** page 1/21

SECTION 1: IDENTIFICATION OF SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

Product identifier

Tradename: CULR™ Art Pigment for Epoxy – Jet Black

Chemical

C.I. Pigment Black 7 and Calciumcarbonat in aqueous dispersion, Caracterisation:

contenting Polyglykol and 1,2-Propandiol.

1.2. Relevant identified uses of the substance or mixture and uses advised again

Relevant identified uses of the substance or mixture:

Industry sector: **Industrial Performance Chemicals**

Paints, lacquers and varnishes industry

Polymers industry Printing Inks Industry

Type of use: Colourant preparation

Details of the supplier of the safety data sheet

Identification of the company:

Easy Composites Ltd

Unit 39 Park Hall Business Village

Stoke on Trent, ST3 5XA. United Kingdom.

+44 (0)1782 454499 Phone:

Information to substance / mixture:

Technical Division:

E-mail: technical@glasscastresin.com

Emergency telephone number

Emergency CONTACT (Office Hours) Phone: +44 (0)1782 454499

SECTION 2: HAZARDS IDENTIFICATION

Classification of the substance / mixture

Classification according CLP regulation (Regulation (EC) No. 1272/2008, as amended):

Categoryof danger	Category HazardSymbol	H-Phrases

Not a hazardous substance or mixture.

2.2. Label elements

Labelling according CLP regulation (Regulation (EC) No. 1272/2008, as amended):

Not a hazardous substance or mixture.

Additional Labelling:

EUH 208 contains mixture of: 1,2-Benzisothiazol-3(2H)-one,

> mixture of: 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one(3:1).

May produce an allergic reaction.

EUH210: Safety data sheet available on request.

Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0,1 % or higher.

No hazards to be specially mentioned.

Tradename: CULR[™] Art Pigment for Epoxy – Jet Black page 2/21

SECTION 3: COMPOSITION / INFORMATION TO INGREDIENTS

3.1. Mixtures

Hazardous ingredients:

Alcohols, C16-18 and C18-unsaturated, ethoxylated (8 EO)

Concentration: $\geq 6.2 - \leq 10.7 \%$ CAS-Number: 68920-66-1 EC-Number: 500-236-9

GHS classification EC:

Skin irritation	Category 2	H315
Acute aquatic toxicity	Category 1	H400
Chronic aquatic toxicity	Category 3	H412
M Factor (Acute aquatic toxicity)		1

M-Factor (Acute aquatic toxicity)

1,2-Benzisothiazolin-3-on

Concentration: $\geq 0,0025 - \leq 0,025 \%$

CAS-Number: 2634-33-5 EC-Number: 220-120-9 INDEX-No.: 613-088-00-6 Registrationnumber: 01-2120761540-60

GHS classification EC:

Acute toxicity	Category 4	H302
Fatal ifinhaled	Category 2	H330
Skin irritation	Category 2	H315
May cause an alergic skin reaction	Category 1	H317
Serious eye damage	Category 1	H318
Acute aquatic toxicity	Category 1	H400
Chronic aquatic toxicity	Category 2	H411

Mixture of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one(3:1)

Concentration: $\geq 0,0002 - \leq 0,0015 \%$

CAS-Number: 55965-84-9
EC-Number: 611-341-5
INDEX-No.: 613-167-005
Registrationnumber: 01-2120764691-48

GHS classification EC:

Acute toxicity	Category 3	H301
Acute toxocity	Category 2	H310
Fatal ifinhaled	Category 2	H330
Causes severe skin burns and eye d.	Category 1B	H314
May cause an alergic skin reaction	Category 1	H317
Acute aquatic toxicity	Category 1	H400
Chronic aquatic toxicity	Category1	H410

The text of H-phrases is shown in section 16.

SECTION 4: FIRST AID MEASURES

4.1. Discription of first aid measures

General information:

Get medical advice/ attention if you feel unwell.

After inhalation:

Move the victim to fresh air.

If you feel unwell, seek medical advice (show the label where possible).

After contact with skin:

In case of contact with skin, clean with plenty of soap and water.

Tradename: CULR[™] Art Pigment for Epoxy – Jet Black

page 3/21

After contact with eyes:

In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

After ingestion:

If swallowed, seek medical advice immediately and show this container or label.

4.2. Most important symptoms and effects, both acute and delayed symptoms

Symptoms:

None known.

Hazards:

None known.

4.3. Indication of any immediate medical attention and special treatment needed

Treatment:

Treat symptomatically.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media:

Water spray jet

Dry powder

Carbon dioxide (CO₂)

Alcohol resistant foam

Extinguishing media that must not be used for safety reasons:

High volume water jet

5.2. Special hazards arising from the substance or mixture

In case of fires, hazardous combustion gases are formed:

Carbon oxides (CO_x)

Nitrogen oxides (NO_x)

5.3. Advice for firefighters

Special protective equipment for firefighting:

Use self-contained breathing apparatus.

Further information:

Wear suitable protective equipment.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Wear suitable personal protective equipment.

6.2. Environment precautions

The product should not be allowed to enter drains, water courses or the soil.

6.3. Methods and material for containment and cleaning up

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).

Treat recovered material as described in the section "Disposal considerations".

6.4. Reference to other sections

Additional information:

Information regarding safe handling, see chapter 7.

page 4/21

Tradename: CULR[™] Art Pigment for Epoxy – Jet Black

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Advice on safe handling:

When used and handled appropriately no special measures are needed.

Hygiene measures:

Wash hands before breaks and at the end of workday.

Use protective skin cream before handling the product.

Take off immediately all contaminated clothing and wash it before reuse.

Advice on protection against fire and explosion:

Normal measures for preventive fire protection.

7.2. Conditions for safe storage, including any incompatibilities

Further information on storage conditions:

Keep containers tightly closed in a cool, well-ventilated place.

Handle and open container with care.

Keep away from flames and sparks.

Storage stability:

Minimum 36 months.

7.3. Specific end use(s)

No further recommendations.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1. Control parameters

Exposure limit values:

Exposure limit values are not available.

DNEL / DMEL-values:

C.I. Pigment Black 7

EC-Number: 215-609-9 CAS-Number: 1333-86-4

Route of exposure	End use	Potential health effects	Value	Remarks
Inhalation	Workers	Long-term systemic effects	2 mg/m ³	DNEL
Inhalation	Workers	Long-term local effects	2 mg/m ³	DNEL

1,2-Benzisothiazol-3(2H)-one EC-Number: 220-120-9 CAS-Number: 2634-33-5

Route of	End use	Potential health	Value	Remarks
exposure		effects		
Inhalation	Workers	Long-term systemic effects	6,81 mg/m ³	DNEL
Dermal	Workers	Long-term systemic effects	0,966 mg/kg bw/day	DNEL
Inhalation	Consumers	Long-term systemic effects	1,2 mg/m ³	DNEL
Dermal	Consumers	Long-term systemic effects	0,345 mg/kg bw/day	DNEL

Tradename: CULR[™] Art Pigment for Epoxy – Jet Black

page 5/21

Silica, amorphous, fumed, crystalline free

EC-Number: 601-216-3 CAS-Number: 112945-52-5

Route of exposure	End use	Potential health effects	Value	Remarks
Inhalation	Workers	Long-term local effects	4 mg/m ³	DNEL

PNEC-values:

Silica, amorphous, fumed, crystalline free

EC-Number: 601-216-3 CAS-Number: 112945-52-5

Environmental compartment	Value
Secondary poisoning	60.000 mg/kg (food)

1,2-Benzisothiazol-3(2H)-one EC-Number: 220-120-9 CAS-Number: 2634-33-5

Environmental compartment	Value
Fresh water	0,00403 mg/l
Marine water	0,000403 mg/l
Intermittend use/release	0,0011 mg/l
Sewage treatment plant	1,03 mg/l
Fresh water sediment	0,0499 mg/kg dry weight (d.w.)
Marine sediment	0,00499 mg/kg dry weight (d.w.)
Soil	3 mg/kg dry weight (d.w.)

Mixture of: 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)

EC-Number: 611-341-5 CAS-Number: 55965-84-9

Environmental compartment	Value
Fresh water	0,049 µg/l
Marine water	0,0098 µg/l
Sewage treatment plant	0,045 µg/l
Soil	0,009 µg/l

8.2. Exposure controls

Appropriate engineering controls:

Handle only in a place equipped with local exhaust (or other appropriate exhaust).

General protective measures:

Wear suitable protective equipment.

Respiratory protection:

When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

Hand protection:

Nitrile rubber

Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact).

Eye protection:

Safety glasses

Body protection:

Wear suitable protective equipment.

Tradename: CULR[™] Art Pigment for Epoxy – Jet Black page 6/21

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical state: liquid
Form: liquid
Colour: black

Odour: not significant Odour threshold: not required pH value: not measured Melting point: not applicable Boiling point: approx. 100 °C > 100 °C Flash point: Evaporation rate: not determined Flammability: not determined Lower explosion limit: not determined Upper explosive limit: not determined Combustion number: not applicable Minimum ignition energy: not determined Vapour pressure: not determined

Vapour density relative to air:

Relative Density:

not determined
not determined
not determined
not determined

Solubility in water: miscible

Octanol/ water partition

coefficient (log Pow): not determined Ignition temperature: not determined Thermal decomposition: > 100 °C Viscosity (dynamic): not tested

Oxidizing properties: no data available

9.2. Other information

Density: 1,20 g/cm³ (20 °C)

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

No dangerous reaction known under conditions of normal use.

10.2. Chemical Stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reaction known under conditions of normal use. Stable.

10.4. Conditions to avoid

None known.

10.5. Incompatible Materials

No data available.

10.6. Hazardous decomposition products

No decomposition if stored and applied as directed.

Tradename: CULR[™] Art Pigment for Epoxy – Jet Black

SECTION 11: TOXICOLOGIC INFORMATION

11.1. Information on toxicological effects Acute toxicity

Informations related to the product:

Acute oral toxicity: Remarks: no data available Acute inhalation toxicity: Remarks: no data available

Acute dermal toxicity: Acute toxicity estimate:> 2.000 mg/kg

Method: Calculation method

Informations related to the component 1,2-Benzisothiazol-3(2H)-one:

Acute oral toxicity: LD50 (Rat, male and female): 670 - 784 mg/kg

Method: OECD Test Guideline 401

GLP: yes

Acute inhalation toxicity: LC50 (Rat, male and female): 0,5 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist Method: OPPTS 870.1300

GLP: yes

Acute dermal toxicity: LD50 (Rat, male and female): > 2.000 mg/kg

GLP: yes

Assessment: The substance or mixture has no acute

page 7/21

dermal toxicity.

Informations related to the component mixture of: 5-chloro-2-methyl-2H-isothiazol-3-one and

2-methyl-2H-isothiazol-3-one (3:1):

Acute oral toxicity: LD50 (Rat): 64 mg/kg

Acute inhalation toxicity: LC50 (Rat, male and female): 0,171 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist LD50 (Rabbit): 92,4 mg/kg

Acute dermal toxicity:

Skin corrosion/irritation

Informations related to the product:

Species: Rabbit

Method: OECD Test Guideline 404

Result: No skin irritation

Remarks: The toxicological data has been taken

from products of similar composition.

Informations related to the component Alcohols, C16-18 and C18-unsaturated, ethoxylated:

Result: Irritating to skin.

<u>Informations related to the component 1,2-Benzisothiazol-3(2H)-one:</u>

Species: Rabbit

Exposure time: 4 h Result: Irritating to skin.

GLP: yes

Informations related to the component mixture of: 5-chloro-2-methyl-2H-isothiazol-3-one and

2-methyl-2H-isothiazol-3-one(3:1):

Species: Rabbit

Result: Causes burns.

Serious eye damage/eye irritation

Informations related to the product:

Species: rabbit eye

Method: OECD Test Guideline 405

Result: No eye irritation

Remarks: The toxicological data has been taken

from products of similar composition.

Tradename: CULR[™] Art Pigment for Epoxy – Jet Black

<u>Informations related to the component 1,2-Benzisothiazol-3(2H)-one:</u>

Species: rabbit eye

Exposure time: 2,9 h - 11 d

Result: Risk of serious damage to eyes.

page 8/21

GLP: yes

Informations related to the component mixture of: 5-chloro-2-methyl-2H-isothiazol-3-one and

2-methyl-2H-isothiazol-3-one(3:1):

Species: rabbit eye

Result: Risk of serious damage to eyes.

Respiratory or skin sensitisation

Informations related to the product:

Remarks: no data available

<u>Informations related to the component 1,2-Benzisothiazol-3(2H)-one:</u>
Test Type:
Guinea pig maximization test

Exposure routes: Dermal

Species: Guinea pig

Method: Other

ResulT: May cause sensitisation by skin contact.

GLP: yes

Informations related to the component mixture of: 5-chloro-2-methyl-2H-isothiazol-3-one and 2-

methyl-2H-isothiazol-3-one(3:1):

Species: Guinea pig

Method: Other

Result: The product is a skin sensitiser,

sub-category 1A.

Assessment: Toxic if swallowed, Fatal in contact with skin,

Fatal ifinhaled,

Causes severe skin burns and eye damage.

May cause an allergic skin reaction.

Germ cell mutagenicity

Informations related to the product:

Genotoxicity in vitro: Remarks: no data available

Germ cell mutagenicity-

Assessment: No information available.

Informations related to the component 1,2-Benzisothiazol-3(2H)-one:

Genotoxicity in vitro: Test Type: Mouse lymphoma assay

Test system: mouse lymphoma cells Concentration: 0,1 - 12,8 µg/ml

Metabolic activation:

with and without metabolic

activation: Method: OECD Test Guideline 476

Result: negative

GLP: yes

Test Type: Ames test

Test system: Salmonella typhimurium Concentration: 0,064 - 200 µg/plate

Metabolic activation:

with and without metabolic

activation: Method: OECD Test Guideline 471

Result: negative

GLP: yes

Tradename: CULR[™] Art Pigment for Epoxy – Jet Black

page 9/21

Test Type: Chromosome aberration test in vitro

Test system: Human lymphocytes Concentration: 1 - 40 µg/ml

Metabolic activation:

with and without metabolic

activation: Method: OECD Test Guideline 473

Result: positive

GLP: yes
Genotoxicity in vivo: Test Type: Ot

Test Type: Other Species: Rat (male)

Strain: wistar

Cell type: Liver cells

Application Route: Ingestion Exposure time: single dose Dose: 560 - 1400 mg/kg

Method: OECD Test Guideline 486

Result: negative

GLP: yes

Test Type: Micronucleus test Species: Mouse (male and female)

Strain: CD1

Cell type: Bone marrow Application Route: Ingestion Exposure time: single dose

Dose: 125-250-500-1000-2000-5000mg/kg

Method: OECD Test Guideline 474

Result: negative

GLP: yes

Germ cell mutagenicity-

Assessment: Did not show mutagenic effects in animal experiments.

Informations related to the component mixture of: 5-chloro-2-methyl-2H-isothiazol-3-one and

2-methyl-2H-isothiazol-3-one(3:1):

Genotoxicity in vitro: Test Type: In vitro study

Metabolic activation:

with and without metabolic

activation: Result: Conflicting results have been seen in different

studies.

Genotoxicity in vivo: Test Type: Micronucleus test

Species: Rat

Cell type: Bone marrow Application Route: Oral Exposure time: ≤ 5 d Dose: 1-5 x ≤ 28 mg/kg

Result: negative

Test Type: Micronucleus test

Species: Mouse Application Route: Oral Exposure time: ≤ 5 d Dose: 1-5 x ≤ 20 - 30 mg/kg

Result: negative

Germ cell mutagenicity-

Assessment: In vivo tests did not show mutagenic effects

Tradename: CULR[™] Art Pigment for Epoxy – Jet Black

Carcinogenicity

Informations related to the product:

Carcinogenicity - Assessment:

nent: No information available.

Informations related to the component 1,2-Benzisothiazol-3(2H)-one:

Carcinogenicity -

Assessment: Not applicable

Informations related to the component mixture of: 5-chloro-2-methyl-2H-isothiazol-3-one and

2-methyl-2H-isothiazol-3-one(3:1):

Carcinogenicity -

Assessment: No evidence of carcinogenicity in animal studies.

Reproductive toxicity

Informations related to the product:

Reproductive toxicity -

Assessment: No information available.

Informations related to the component 1,2-Benzisothiazol-3(2H)-one:

Effects on fertility: Species: Rat, male

Application Route: oral (fed) Dose: 18,5 - 97,8 mg/kg

General Toxicity - Parent: NOAEL: 18,5 mg/kg

body weight

General Toxicity F1: NOAEL: 48 mg/kg body weight

page 10/21

Method: Other GLP: yes

Species: Rat, female Application Route: oral (feed) Dose: 27,0 - 114,8 mg/kg

General Toxicity - Parent: NOAEL: 27 mg/kg

body weight

General Toxicity F1: NOAEL: 56,6 mg/kg body weight

Method: Other GLP: yes

Effects on foetal development: Species: Rat, female

Application Route: oral (gavage) Dose: 10 - 40 - 100 mg/kg

General Toxicity Maternal: NOAEL: 10 mg/kg

body weight

Teratogenicity: NOAEL: 40 mg/kg body weight Method: Directive 67/548/EEC, Annex V, B.31.

GLP: yes

Reproductive toxicity - Assessment: No evidence of adverse effects on sexual function

and fertility, or on development, based on animal

experiments.

Embryotoxicity classification not possible from current

data.

Informations related to the component mixture of: 5-chloro-2-methyl-2H-isothiazol-3-one and

2-methyl-2H-isothiazol-3-one(3:1):

Effects on fertility: Species: Rat, male and female

Application Route: Drinking water

Dose: 25 - 75 - 225 ppm

General Toxicity - Parent: NOAEL: 16,3 - 24,7 mg/kg

body weight

General Toxicity F1: NOAEL: 16,3 - 24,7 mg/kg

body weight

Tradename: CULR[™] Art Pigment for Epoxy – Jet Black

Method: Other GLP: yes

Species: Rat, male and female Application Route: Drinking water

Dose: 30 - 100 - 300 ppm

General Toxicity - Parent: NOAEL: 2,8 - 4,4 mg/kg

page 11/21

body weight

General Toxicity F1: NOAEL: 22,7 - 28 mg/kg

body weight

General Toxicity F2: NOAEL: 35,7 - 39,1 mg/kg

body weight

Method: OECD Test Guideline 416

GLP: yes

Effects on foetal development: Species: Rat, male and female

Application Route: oral (gavage)

Dose: ≤ 15 mg/kg

Developmental Toxicity: NOAEL: 15 mg/kg body weight

Method: Other

Species: Rat, male and female Application Route: oral (gavage)

General Toxicity Maternal: NOAEL: ≤ 3,95 mg/kg

body weight Method: Other

Reproductive toxicity – Assessment: Weight of evidence does not support classification for

reproductive toxicity

Embryotoxicity classification not possible from current

data.

STOT - single exposure

Informations related to the component product:

Remarks: no data available

Informations related to the component 1,2-Benzisothiazol-3(2H)-one:

Assessment: The substance or mixture is not classified as specific

target organ toxicant, single exposure.

Informations related to the component mixture of: 5-chloro-2-methyl-2H-isothiazol-3-one and

2-methyl-2H-isothiazol-3-one(3:1):

Assessment: The substance or mixture is not classified as specific

target organ toxicant, single exposure.

STOT - repeated exposure

Informations related to the component product:

Remarks: no data available

Informations related to the component 1,2-Benzisothiazol-3(2H)-one:

Assessment: The substance or mixture is not classified as specific

target organ toxicant, repeated exposure.

Informations related to the component mixture of: 5-chloro-2-methyl-2H-isothiazol-3-one and

2-methyl-2H-isothiazol-3-one(3:1):

Assessment: The substance or mixture is not classified as specific

target organ toxicant, repeated exposure.

Repeated dose toxicity

Informations related to the product:

Remarks: This information is not available.

<u>Informations related to the component 1,2-Benzisothiazol-3(2H)-one:</u>

Species: Dog, male and female

NOAEL: 5 mg/kg

Tradename: CULR[™] Art Pigment for Epoxy – Jet Black

LOAEL: 20 mg/kg

Application Route: oral (gavage)

page 12/21

Exposure time: 90 d Number of exposures: daily Dose: 5 - 20 - 50 mg/kg

Group: yes

Method: 88/302/EC

GLP: yes

Informations related to the component mixture of: 5-chloro-2-methyl-2H-isothiazol-3-one and

2-methyl-2H-isothiazol-3-one(3:1):

Species: Rat, male and female

NOAEL: 16,3 - 24,7 mg/kg ApplicationRoute: Drinking water

Exposure time: 90 d Number of exposures: daily Dose: 25 - 75 - 225 ppm

Group: yes Method: Other GLP: yes

Aspiration toxicity

Informations related to the product:

no data available

Informations related to the component 1,2-Benzisothiazol-3(2H)-one:

No aspiration toxicity classification

Informations related to the component mixture of: 5-chloro-2-methyl-2H-isothiazol-3-one and

<u>2-methyl-2H-isothiazol-3-one(3:1):</u>
No aspiration toxicity classification

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity:

Informations related to the product:

Toxicity to fish: Remarks: no data available

Toxicity to daphnia and other

aquatic invertebrates: Remarks: no data available Remarks: no data available

Informations related to the component Alcohols, C16-18 and C18-unsaturated, ethoxylated:

M-Factor

(Acute aquatic toxicity): 1

Ecotoxicology Assessment

Acute aquatic toxicity: Very toxic to aquatic life.

Chronic aquatic toxicity: Harmful to aquatic life with long lasting effects.

Informations related to the component 1,2-Benzisothiazol-3(2H)-one:

Toxicity to fish: LC50 (Oncorhynchus mykiss (rainbow trout)): 2,18 mg/l

Exposure time: 96 h
Test Type: static test
Analytical monitoring: yes

Method: OECD Test Guideline 203

GLP: yes

LC50 (Cyprinodon variegatus (sheepshead minnow)):

approx.16,7 mg/l Exposure time: 96 h

Tradename: CULR[™] Art Pigment for Epoxy – Jet Black

Test Type: static test Analytical monitoring: yes

Method: No information available.

GLP: yes

Toxicity to daphnia and other aquatic invertebrates:

EC50 (Daphnia magna (Water flea)): 2,94 mg/l

page 13/21

Exposure time: 48 h Test Type: static test Analytical monitoring: yes

Method: OECD Test Guideline 202

GLP: yes

EC0 (Daphnia magna (Water flea)): 0,643 mg/l

Exposure time: 48 h Test Type: static test Analytical monitoring: yes

Method: OECD Test Guideline 202

GLP: yes

EC50 (Mysidopsis bahia (opossum shrimp)): 0,9893 mg/l

Exposure time: 96 h
Test Type: static test
Analytical monitoring: yes

Method: Other GLP: yes

Remarks: salt water

NOEC (Mysidopsis bahia (opossum shrimp)): 0,25 mg/l

Exposure time: 96 h
Test Type: static test
Analytical monitoring: yes

Method: Other GLP: yes

Remarks: salt water

EC50 (Selenastrum capricornutum (green algae)):

0,155 mg/l

End point: Growth rate Exposure time: 72 h Analytical monitoring: yes

Method: OECD Test Guideline 201

GLP: yes

NOEC (Selenastrum capricornutum (green algae)):

0,055 mg/l

End point: Growth rate Exposure time: 72 h Analytical monitoring: yes

Method: OECD Test Guideline 201

GLP: yes

M-Factor

Toxicity to algae:

(Acute aquatic toxicity): 1

Toxicity to microorganisms: EC50 (activated sludge of a predominantly domestic

sewage): 23 mg/l

End point: Bacteria toxicity (respiration inhibition)

Exposure time: 3 h
Test Type: aquatic
Analytical monitoring: no

Method: OECD Test Guideline 209

GLP: yes

Tradename: CULR[™] Art Pigment for Epoxy – Jet Black

page 14/21

Remarks: The details of the toxic effect relate to the nominal concentration.

EC50: > 811,5 mg/kg dry weight (d.w.)

Exposure time: 28 d Test Type: Soil

Analytical monitoring: yes Method: OECD 216

GLP: yes

Remarks: The details of the toxic effect relate to the

nominal concentration.

NOEC: 263,7 mg/kg dry weight (d.w.)

Exposure time: 28 d Test Type: Soil

Analytical monitoring: yes Method: OECD 216

GLP: yes

Remarks: The details of the toxic effect relate to the

nominal concentration.

Toxicity to fish

(Chronic toxicity): NOEC: 0,21 mg/l Exposure time: 28 d

Species: Oncorhynchus mykiss (rainbow trout)

Analytical monitoring: yes

Method: OECD Test Guideline 215

GLP: yes

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity):

NOEC: 1,2 mg/l

End point: Reproduction rate

Exposure time: 21 d

Species: Daphnia magna (Water flea)

Analytical monitoring: yes

Method: OECD Test Guideline 211

GLP: yes

NOEC: 1,9 mg/l

End point: Reproduction rate

Exposure time: 21 d

Species: Daphnia magna (Water flea)

Analytical monitoring: yes

Method: OECD Test Guideline 211

GLP: yes

Toxicity to soil dwelling organisms:

Test Type: artificial soil LC50: > 410,6 mg/kg Exposure time: 14 d End point: mortality

Species: Eisenia fetida (earthworms) Method: OECD Test Guideline 207

GLP:yes

Remarks: The details of the toxic effect relate to the

nominal concentration.

Test Type: artificial soil NOEC: 234,5 mg/kg Exposure time: 14 d

Tradename: CULR[™] Art Pigment for Epoxy – Jet Black

End point: mortality

Species: Eisenia fetida (earthworms) Method: OECD Test Guideline 207

GLP:yes

Remarks: The details of the toxic effect relate to the

page 15/21

nominal concentration.

Plant toxicity: EC50: 340 mg/kg

Exposure time: 20 d End point: Growth

Species: Phaseolus vulgaris Analytical monitoring: yes Method: OECD Guide-line 208

GLP:yes

Remarks: The details of the toxic effect relate to the

nominal concentration.

NOEC: 90 mg/kg Exposure time: 20 d End point: Growth

Species: Phaseolus vulgaris Analytical monitoring: yes Method: OECD Guide-line 208

GLP:yes

Remarks: The details of the toxic effect relate to the

nominal concentration.

EC50: 300 mg/kg Exposure time: 19 d End point: Growth

Species: Triticum aestivm (wheat) Analytical monitoring: yes Method: OECD Guide-line 208

GLP: yes

Remarks: The details of the toxic effect relate to the

nominal concentration.

NOEC: 51 mg/kg Exposure time: 19 d End point: Growth

Species: Triticum aestivm (wheat)

Analytical monitoring: yes Method: OECD Guide-line 208

GLP:yes

Remarks: The details of the toxic effect relate to the

nominal concentration. Remarks: not available

Ecotoxicology Assessment

Sediment toxicity:

Toxicity to fish:

Acute aguatic toxicity: Very toxic to aguatic life.

Chronic aquatic toxicity: Toxic to aquatic life with long lasting effects.

Informations related to the component mixture of: 5-chloro-2-methyl-2H-isothiazol-3-one and 2 methyl 2H isothiazol 3 one/3:1):

2-methyl-2H-isothiazol-3-one(3:1):

EC50 (Oncorhynchus mykiss (rainbow trout)): 0,22 mg/l

Exposure time: 96 h

Method: OECD Test Guideline 203

Toxicity to daphnia and other

aquatic invertebrates: EC50 (Daphnia magna (Water flea)): 0,1 mg/l

Exposure time: 48 h

Method: OECD Test Guideline 202

Tradename: CULR[™] Art Pigment for Epoxy – Jet Black

Toxicity to algae: EC50 (Skeletonema costatum (marine diatom)):

0,0052 mg/l Exposure time: 48 h Test Type: static test

Method: OECD Test Guideline 201

NOEC (Skeletonema costatum (marine diatom)):

page 16/21

0,00049 mg/l Exposure time: 48 h Test Type: static test

Method: OECD Test Guideline 201

M-Factor

(Acute aquatic toxicity): 100

Toxicity to microorganisms: EC50 (activated sludge): 7,92 mg/l

Exposure time: 3 h

Method: OECD Test Guideline 209

Toxicity to fish

(Chronic toxicity): NOEC: 0,098 mg/l

Exposure time: 28 d

Species: Oncorhynchus mykiss (rainbow trout)

Method: OECD Test Guideline 215

Toxicity to daphnia and other aquatic invertebrates

(Chronic toxicity): NOEC: 0,004 mg/l

Exposure time: 21 d

Species: Daphnia magna (Water flea) Method: OECD Test Guideline 202

M-Factor

(Chronic aquatic toxicity): 10

Toxicity to soil dwelling

organisms: LC50: 86,6 mg/kg dry weight (d.w.)

Exposure time: 14 d

Species: Eisenia fetida (earthworms) Method: OECD Test Guideline 207 NOEC: 8,83 mg/kg dry weight (d.w.)

Exposure time: 14 d

Species: Eisenia fetida (earthworms)

OECD Test Guideline 207

Ecotoxicology Assessment

Acute aquatic toxicity: Very toxic to aquatic life.

Chronic aquatic toxicity: Very toxic to aquatic life with long lasting effects.

12.2. Persistence and degradability

Informations related to the product:

Biodegradability: no data available

<u>Informations related to the component 1,2-Benzisothiazol-3(2H)-one:</u>

Biodegradability: Test Type: aerobic

Inoculum: activated sludge Concentration: 1 mg/l

Result: Partially biodegradable.

Exposure time: 63 d

Method: OECD Test Guideline 301C

GLP: yes

Physico-chemical removability: Remarks: Biodegradable

Stability in water: Test Type: abiotic

Degradation half life: 219 d

Tradename: CULR[™] Art Pigment for Epoxy – Jet Black

pH: 4

Hydrolysis: at 50 °C

Method: OECD Test Guideline 111

page 17/21

GLP: yes

Test Type: abiotic

Degradation half life: > 200 d

pH: 7

Hydrolysis: at 50 °C

Method: OECD Test Guideline 111

GLP: yes

Test Type: abiotic

Degradation half life: 145 d

pH: 9

Hydrolysis: at 50 °C

Method: OECD Test Guideline 111

GLP: yes

Photodegradation: Test Type: water

Light source: Xenon lamp Light spectrum: 290 - 400 nm

Degradation (direct photolysis): < 1,5 %

GLP: yes

Test Type: air Method: calculated

GLP: no

Remarks: Decomposes rapidly in contact with light.

Informations related to the component mixture of: 5-chloro-2-methyl-2H-isothiazol-3-one and

2-methyl-2H-isothiazol-3-one(3:1):

Biodegradability: Test Type: aerobic

Inoculum: activated sludge Result: Not rapidly biodegradable Method: OECD Test Guideline 301B

Photodegradation: Test Type: water

Light source: Sunlight

12.3. Bioaccumulative potential

Informations related to the product:

Bioaccumulation: no data available

Informations related to the component 1,2-Benzisothiazol-3(2H)-one:

Bioaccumulation: Species: Lepomis macrochirus (Bluegill sunfish)

Exposure time: 56 d Concentration: 0,1 mg/l

Bioconcentration factor (BCF): 6,62 Method: OECD Test Guideline 305

GLP: no

Remarks: Due to the distribution coefficient n-octanol/water,accumulation in organisms is

not expected.

Informations related to the component mixture of: 5-chloro-2-methyl-2H-isothiazol-3-one and

2-methyl-2H-isothiazol-3-one(3:1):

Bioaccumulation: Bioconcentration factor (BCF): 3,6

Method: calculated

Remarks: Does not accumulate in organisms.

Partition coefficient

n-octanol/water: log Pow: -0,71 - 0,75

Method: OECD Test Guideline 107

Tradename: CULR[™] Art Pigment for Epoxy – Jet Black page 18/21

12.4. Mobility in soil

<u>Informations related to the component 1,2-Benzisothiazol-3(2H)-one:</u>

Distribution among

environmental compartments: Adsorption/Soil

Medium: water – soil Koc: 235 – 566 Method: Other

12.5. Results of PBT and vPvB assessment

Informations related to the product:

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0,1 % or higher.

Informations related to the component 1,2-Benzisothiazol-3(2H)-one:

Assessment: The substance is not identified as a PBT or as a vPvB

substance.

Informations related to the component mixture of: 5-chloro-2-methyl-2H-isothiazol-3-one and

2-methyl-2H-isothiazol-3-one(3:1):

Assessment: This substance is not considered to be persistent,

bioaccumulating and toxic (PBT).

12.6. Other adverse effects

Informations related to the product:

Environmental fate and pathways: no data available Additional ecological information: no data available

Informations related to the component 1,2-Benzisothiazol-3(2H)-one:

Environmental fate and pathways: not available

Additional ecological information: Do not allow to enter ground water, waterways or

waste water.

Informations related to the component mixture of: 5-chloro-2-methyl-2H-isothiazol-3-one and

2-methyl-2H-isothiazol-3-one(3:1):

Additional ecological information: The product should not be allowed to enter drains,

watercourses or the soil.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Product:

Dispose of in accordance with the European Directives on waste and hazardous waste.

Uncleaned packaging:

This material and its container must be disposed of in a safe way.

SECTION 14: TRANSPORT INFORMATION

14.1. to 14.5.

ADR: not restricted ADN: not restricted RID: not restricted IATA: not restricted IMDG: not restricted

14.6. Special precautions for users

See sections 6 to 8 of this Safety Data Sheet.

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

No transport as bulk according IBC-Code.

Tradename: CULR[™] Art Pigment for Epoxy – Jet Black page 19/21

SECTION 15: REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

REACH - Candidate List of Substances of

Very High Concern for Authorisation (Article 59): Not applicable

REACH - List of substances subject to authorisation

(Annex XIV): Not applicable

Regulation (EC) No 1005/2009 on substances that

deplete the ozone layer: Not applicable

Regulation (EC) No 850/2004 on persistent

organic pollutants: Not applicable

Other regulations:

Apart from the data/regulations specified in this chapter, no further information is available concerning safety, health and environmental protection.

15.2. Chemical safety assessment

No Chemical Safety Assessment (CSA) is yet available for the substance, or for the component substances, contained in this product.

SECTION 16: OTHER INFORMATION

Observe the legal requirements nationally and locally.

List of the text of the hazard statements mentioned section 3 (H-phrases):

H301 Toxic if swallowed.
H302 Harmful if swallowed.
H310 Fatal in contact with skin.

H314 Causes severe skin burns and eye damage.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction. H318 Causes serious eye damage.

H330 Fatal if inhaled.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.
 H411 Toxic to aquatic life with long lasting effects.
 H412 Harmful to aquatic life with long lasting effects.

Full text of other abbreviations

Acute Tox.: Acute toxicity

Aquatic Acute: Short-term (acute) aquatic hazard Aquatic Chronic: Long-term (chronic) aquatic hazard

Eye Dam.: Serious eye damage
Skin Corr.: Skin corrosion
Skin Irrit.: Skin irritation
Skin Sens.: Skin sensitisation

STOT RE: Specific target organ toxicity - repeated exposure

Change compared to the previous version:

Change in the composition

Legend

ADN European Agreement concerning the International Carriage of

Dangerous Goods by Inland Waterways

ADR European Agreement concerning the International Carriage of

Dangerous Goods by Road

AICS Australian Inventory of Chemical Substances
ASTM American Society for the Testing of Materials

bw Body weight

IC50

in acc. with Regulation (EU) No. 2015/830 Revision Date: 04/02/2019

page 20/21

Tradename: CULR[™] Art Pigment for Epoxy – Jet Black

CLP Classification Labelling Packaging Regulation

Regulation (EC) No 1272/2008

CMR Carcinogen, Mutagen or Reproductive Toxicant
DIN Standard of the German Institute for Standardisation
DMEL Derived Minimal Effect Level (genotoxic substances)

DNEL Derived No Effect Level

DSL Domestic Substances List (Canada)
ECHA European Chemicals Agency
EC-Number European Community number

ECx Concentration associated with x% response ELx Loading rate associated with x% response

EmS Emergency Schedule

ENCS Existing and New Chemical Substances (Japan)
ErCx Concentration associated with x% growth rate response

GHS Globally Harmonized System GLP Good Laboratory Practice

IARC International Agency for Research on Cancer IATA International Air Transport Association

IBC International Code for the Construction and Equipment of Ships

carrying Dangerous Chemicals in Bulk Half maximal inhibitory concentration International Civil Aviation Organization

ICAO International Civil Aviation Organization
IECSC Inventory of Existing Chemical Substances in China

IMDGInternational Maritime Dangerous GoodsIMOInternational Maritime OrganizationISHLIndustrial Safety and Health Law (Japan)ISOInternational Organisation for Standardization

KECI Korea Existing Chemicals Inventory

LC50 Lethal Concentration to 50 % of a test population

LD50 Lethal Dose to 50% of a test population (Median Lethal Dose)
MARPOL International Convention for the Prevention of Pollution from Ships

n.o.s. Not Otherwise Specified

NO(A)EC No Observed (Adverse) Effect Concentration

NO(A)EL No Observed (Adverse) Effect Level NOELR No Observable Effect Loading Rate NZIoC New Zealand Inventory of Chemicals

OECD Organization for Economic Co-operation and Development

OPPTS Office of Chemical Safety and Pollution Prevention PBT Persistent, Bioaccumulative and Toxic substance

PICCS Philippines Inventory of Chemicals and Chemical Substances

(Q)SAR (Quantitative) Structure Activity Relationship

REACH Regulation (EC) No 1907/2006 of the European Parliament and of the

Council concerning the Registration, Evaluation, Authorisation and

Restriction of Chemicals

RID Regulations concerning the International Carriage of Dangerous Goods

by Rail

SADT Self-Accelerating Decomposition Temperature

SDS Safety Data Sheet

TCSI Taiwan Chemical Substance Inventory
TRGS Technical Rule for Hazardous Substances
TSCA Toxic Substances Control Act (United States)

UN United Nations

vPvB Very Persistent and Very Bioaccumulative

Tradename: CULR[™] Art Pigment for Epoxy – Jet Black

page 21/21

Revision Date: 04/02/2019

Decimal notation: "thousands" places are identified with a dot (for example, "2.000 mg/kg" means "two thousand mg/kg"). Decimal places are identified with a comma (for example, "1,35 g/cm³" means "one point three five g/cm³").

This information corresponds to the present state of our knowledge and is intended as a general description of our products and their possible applications. Easy Composites Ltd makes no warranties, express or implied, as to the information accuracy, adequacy, sufficiency or freedom from defect and assumes no liability in connection with any use of this information. Any user of this product is responsible for determining the suitability of Easy Composites Ltd products for its particular application. Nothing included in this information waives any of Easy Composites Ltd 's General Terms and Conditions of Sale, which control unless it agrees otherwise in writing.

Any existing intellectual/industrial property rights must be observed. Due to possible changes in our products and applicable national and international regulations and laws, the status of our products could change. Material Safety Data Sheets providing safety precautions, that should be observed when handling or storing Easy Composites Ltd products, are available upon request and are provided in compliance with applicable law. You should obtain and review the applicable Material Safety Data Sheet information before handling any of these products.

For additional information, please contact Easy Composites Ltd.

SAFETY DATA SHEET

Glass Cast®

in acc. with Regulation (EU) No. 2015/830 Revision Date: 04/02/2019

Tradename: CULR[™] Art Pigment for Epoxy – Fuchsia Pink page 1/21

SECTION 1: IDENTIFICATION OF SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

1.1. Product identifier

Tradename: CULR™ Art Pigment for Epoxy – Fuchsia Pink

Chemical

characterisation: C.I. Pigment Red 122 and Calciumcarbonat in aqueous dispersion,

contenting Polyglykol and 1,2-Propandiol.

1.2. Relevant identified uses of the substance or mixture and uses advised again

Relevant identified uses of the substance or mixture:

Industry sector: Industrial Performance Chemicals

Paints, lacquers and varnishes industry

Polymers industry
Printing Inks Industry

Type of use: Colourant preparation

1.3. Details of the supplier of the safety data sheet

Identification of the company:

Easy Composites Ltd

Unit 39 Park Hall Business Village

Stoke on Trent, ST3 5XA. United Kingdom.

Phone: +44 (0)1782 4544499

Information to substance / mixture:

Division: Technical

E-mail: technical@glasscastresin.com

1.4. Emergency telephone number

Emergency CONTACT (Office Hours) Phone: +44 (0)1782 4544499

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance / mixture

Classification according CLP regulation (Regulation (EC) No. 1272/2008, as amended):

Categoryof danger	Category HazardSymbol	H-Phrases

Not a hazardous substance or mixture.

2.2. Label elements

Labelling according CLP regulation (Regulation (EC) No. 1272/2008, as amended):

Not a hazardous substance or mixture.

Additional Labelling:

EUH 208 contains mixture of: 1,2-Benzisothiazol-3(2H)-one,

mixture of: 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one(3:1).

May produce an allergic reaction.

EUH210: Safety data sheet available on request.

2.3. Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0,1 % or higher.

No hazards to be specially mentioned.

Tradename: CULR[™] Art Pigment for Epoxy – Fuchsia Pink page 2/21

SECTION 3: COMPOSITION / INFORMATION TO INGREDIENTS

3.1. Mixtures

Hazardous ingredients:

Alcohols, C16-18 and C18-unsaturated, ethoxylated (8 EO)

Concentration: ≥ 8,3 - ≤ 14,4 % CAS-Number: 68920-66-1 EC-Number: 500-236-9

GHS classification EC:

Skin irritation	Category 2	H315
Acute aquatic toxicity	Category 1	H400
Chronic aquatic toxicity	Category 3	H412
		Ι.

M-Factor (Acute aquatic toxicity) 1

1,2-Benzisothiazolin-3-on

Concentration: $\geq 0,0025 - \leq 0,025 \%$

CAS-Number: 2634-33-5 EC-Number: 220-120-9 INDEX-No.: 613-088-00-6 Registrationnumber: 01-2120761540-60

GHS classification EC:

Acute toxicity	Category 4	H302
Fatal ifinhaled	Category 2	H330
Skin irritation	Category 2	H315
May cause an alergic skin reaction	Category 1	H317
Serious eye damage	Category 1	H318
Acute aquatic toxicity	Category 1	H400
Chronic aquatic toxicity	Category 2	H411

Mixture of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one(3:1)

Concentration: $\geq 0,0002 - \leq 0,0015 \%$

CAS-Number: 55965-84-9
EC-Number: 611-341-5
INDEX-No.: 613-167-005
Registrationnumber: 01-2120764691-48

GHS classification EC:

Acute toxicity	Category 3	H301
Acute toxocity	Category 2	H310
Fatal ifinhaled	Category 2	H330
Causes severe skin burns and eye d.	Category 1B	H314
May cause an alergic skin reaction	Category 1	H317
Acute aquatic toxicity	Category 1	H400
Chronic aquatic toxicity	Category1	H410

The text of H-phrases is shown in section 16.

SECTION 4: FIRST AID MEASURES

4.1. Discription of first aid measures

General information:

Get medical advice/ attention if you feel unwell.

After inhalation:

Move the victim to fresh air.

If you feel unwell, seek medical advice (show the label where possible).

After contact with skin:

In case of contact with skin, clean with plenty of soap and water.

Tradename: CULR[™] Art Pigment for Epoxy – Fuchsia Pink

page 3/21

After contact with eyes:

In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

After ingestion:

If swallowed, seek medical advice immediately and show this container or label.

4.2. Most important symptoms and effects, both acute and delayed symptoms

Symptoms:

None known.

Hazards:

None known.

4.3. Indication of any immediate medical attention and special treatment needed

Treatment:

Treat symptomatically.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media:

Water spray jet

Dry powder

Carbon dioxide (CO₂)

Alcohol resistant foam

Extinguishing media that must not be used for safety reasons:

High volume water jet

5.2. Special hazards arising from the substance or mixture

In case of fires, hazardous combustion gases are formed:

Carbon oxides (CO_x)

Nitrogen oxides (NO_x)

5.3. Advice for firefighters

Special protective equipment for firefighting:

Use self-contained breathing apparatus.

Further information:

Wear suitable protective equipment.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Wear suitable personal protective equipment.

6.2. Environment precautions

The product should not be allowed to enter drains, water courses or the soil.

6.3. Methods and material for containment and cleaning up

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).

Treat recovered material as described in the section "Disposal considerations".

6.4. Reference to other sections

Additional information:

Information regarding safe handling, see chapter 7.

Tradename: CULR[™] Art Pigment for Epoxy – Fuchsia Pink page 4/21

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Advice on safe handling:

When used and handled appropriately no special measures are needed.

Hygiene measures:

Wash hands before breaks and at the end of workday.

Use protective skin cream before handling the product.

Take off immediately all contaminated clothing and wash it before reuse.

Advice on protection against fire and explosion:

Normal measures for preventive fire protection.

7.2. Conditions for safe storage, including any incompatibilities

Further information on storage conditions:

Keep containers tightly closed in a cool, well-ventilated place.

Handle and open container with care.

Keep away from flames and sparks.

Storage stability:

Minimum 36 months.

7.3. Specific end use(s)

No further recommendations.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1. Control parameters

Exposure limit values:

Exposure limit values are not available.

DNEL / DMEL-values:

C.I. Pigment Red 122

EC-Number: 213-561-3 CAS-Number: 980-26-7

Route of exposure	End use	Potential health effects	Value	Remarks
Dermal	Workers	Long-term systemic effects	42 mg/kg bw/day	DNEL
Inhalation	Workers	Long-term systemic effects	147 mg/m ³	DNEL
Inhalation	Workers	Long-term local effects	3 mg/m ³	DNEL
Dermal	General population	Long-term systemic effects	25 mg/kg bw/day	DNEL
Oral	General population	Long-term systemic effects	25 mg/kg bw/day	DNEL

1,2-Benzisothiazol-3(2H)-one EC-Number: 220-120-9 CAS-Number: 2634-33-5

Route of exposure	End use	Potential health effects	Value	Remarks
Inhalation	Workers	Long-term systemic effects	6,81 mg/m ³	DNEL
Dermal	Workers	Long-term systemic effects	0,966 mg/kg bw/day	DNEL

Tradename: CULR[™] Art Pigment for Epoxy – Fuchsia Pink

 Inhalation
 Consumers
 Long-term systemic effects
 1,2 mg/m³
 DNEL

 Dermal
 Consumers
 Long-term systemic effects
 0,345 mg/kg bw/day
 DNEL

page 5/21

Silica, amorphous, fumed, crystalline free

EC-Number: 601-216-3 CAS-Number: 112945-52-5

Route of exposure	End use	Potential health effects	Value	Remarks
Inhalation	Workers	Long-term local effects	4 mg/m ³	DNEL

PNEC-values:

Silica, amorphous, fumed, crystalline free

EC-Number: 601-216-3 CAS-Number: 112945-52-5

Environmental compartment	Value	
Secondary poisoning	60.000 mg/kg (food)	

1,2-Benzisothiazol-3(2H)-one EC-Number: 220-120-9 CAS-Number: 2634-33-5

Environmental compartment	Value
Fresh water	0,00403 mg/l
Marine water	0,000403 mg/l
Intermittend use/release	0,0011 mg/l
Sewage treatment plant	1,03 mg/l
Fresh water sediment	0,0499 mg/kg dry weight (d.w.)
Marine sediment	0,00499 mg/kg dry weight (d.w.)
Soil	3 mg/kg dry weight (d.w.)

Mixture of: 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)

EC-Number: 611-341-5 CAS-Number: 55965-84-9

Environmental compartment	Value
Fresh water	0,049 μg/l
Marine water	0,0098 µg/l
Sewage treatment plant	0,045 μg/l
Soil	0,009 μg/l

8.2. Exposure controls

Appropriate engineering controls:

Handle only in a place equipped with local exhaust (or other appropriate exhaust).

General protective measures:

Wear suitable protective equipment.

Respiratory protection:

When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

Hand protection:

Nitrile rubber

Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact).

page 6/21

Tradename: CULR[™] Art Pigment for Epoxy – Fuchsia Pink

Eye protection: Safety glasses Body protection:

Wear suitable protective equipment.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical state: liquid Form: liquid Colour: pink

Odour:
Odour threshold:
pH value:
Melting point:
Boiling point:
Flash point:

Not significant
not required
not measured
not applicable
approx. 100 °C
Flash point:

> 100 °C

Evaporation rate:

Flammability:

Lower explosion limit:

Upper explosive limit:

Combustion number:

Minimum ignition energy:

Napour pressure:

not determined
not applicable
not determined
not determined

Vapour density relative to air: not determined Relative Density: no data available

Solubility in water: miscible

Octanol/ water partition

coefficient (log Pow): not determined Ignition temperature: not determined Thermal decomposition: > 100 °C Viscosity (dynamic): not tested

Oxidizing properties: no data available

9.2. Other information

Density: 1,18 g/cm³ (20 °C)

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

No dangerous reaction known under conditions of normal use.

10.2. Chemical Stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reaction known under conditions of normal use. Stable.

10.4. Conditions to avoid

None known.

10.5. Incompatible Materials

No data available.

10.6. Hazardous decomposition products

No decomposition if stored and applied as directed.

Tradename: CULR[™] Art Pigment for Epoxy – Fuchsia Pink page 7/21

SECTION 11: TOXICOLOGIC INFORMATION

11.1. Information on toxicological effects Acute toxicity

Acute inhalation toxicity:

Acute dermal toxicity:

Informations related to the product:

Acute oral toxicity: Acute toxicity estimate: > 2.000 mg/kg

Method: Calculation method Remarks: no data available Remarks: no data available

Informations related to the component 1,2-Benzisothiazol-3(2H)-one:

Acute oral toxicity: LD50 (Rat, male and female): 670 - 784 mg/kg

Method: OECD Test Guideline 401

GLP: yes

Acute inhalation toxicity: LC50 (Rat, male and female): 0,5 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist Method: OPPTS 870.1300

GLP: yes

Acute dermal toxicity: LD50 (Rat, male and female): > 2.000 mg/kg

GLP: yes

Assessment: The substance or mixture has no acute

dermal toxicity.

Informations related to the component mixture of: 5-chloro-2-methyl-2H-isothiazol-3-one and

2-methyl-2H-isothiazol-3-one (3:1):

Acute oral toxicity: LD50 (Rat): 64 mg/kg

Acute inhalation toxicity: LC50 (Rat, male and female): 0,171 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Acute dermal toxicity: LD50 (Rabbit): 92,4 mg/kg

Skin corrosion/irritation

Informations related to the product:

Species: Rabbit

Method: OECD Test Guideline 404

Result: No skin irritation

Remarks: The toxicological data has been taken

from products of similar composition.

Informations related to the component Alcohols, C16-18 and C18-unsaturated, ethoxylated:

Result: Irritating to skin.

<u>Informations related to the component 1,2-Benzisothiazol-3(2H)-one:</u>

Species: Rabbit

Exposure time: 4 h Result: Irritating to skin.

GLP: yes

Informations related to the component mixture of: 5-chloro-2-methyl-2H-isothiazol-3-one and

2-methyl-2H-isothiazol-3-one(3:1):

Species: Rabbit

Result: Causes burns.

Serious eye damage/eye irritation

Informations related to the product:

Species: rabbit eye

Method: OECD Test Guideline 405

Result: No eye irritation

Remarks: The toxicological data has been taken

from products of similar composition.

Tradename: CULR[™] Art Pigment for Epoxy – Fuchsia Pink

<u>Informations related to the component 1,2-Benzisothiazol-3(2H)-one:</u>

Species: rabbit eye

Exposure time: 2,9 h - 11 d

Result: Risk of serious damage to eyes.

page 8/21

GLP: yes

Informations related to the component mixture of: 5-chloro-2-methyl-2H-isothiazol-3-one and

2-methyl-2H-isothiazol-3-one(3:1):

Species: rabbit eye

Result: Risk of serious damage to eyes.

Respiratory or skin sensitisation

Informations related to the product:

Remarks: no data available

Informations related to the component 1,2-Benzisothiazol-3(2H)-one:

Test Type: Guinea pig maximization test

Exposure routes: Dermal

Species: Guinea pig

Method: Other

ResulT: May cause sensitisation by skin contact.

GLP: yes

Informations related to the component mixture of: 5-chloro-2-methyl-2H-isothiazol-3-one and 2-

methyl-2H-isothiazol-3-one(3:1):

Species: Guinea pig

Method: Other

Result: The product is a skin sensitiser,

sub-category 1A.

Assessment: Toxic if swallowed, Fatal in contact with skin,

Fatal ifinhaled,

Causes severe skin burns and eye damage.

May cause an allergic skin reaction.

Germ cell mutagenicity

Informations related to the product:

Genotoxicity in vitro: Remarks: no data available

Germ cell mutagenicity-

Assessment: No information available.

Informations related to the component 1,2-Benzisothiazol-3(2H)-one:

Genotoxicity in vitro: Test Type: Mouse lymphoma assay

Test system: mouse lymphoma cells Concentration: 0,1 - 12,8 µg/ml

Metabolic activation:

with and without metabolic

activation: Method: OECD Test Guideline 476

Result: negative

GLP: yes

Test Type: Ames test

Test system: Salmonella typhimurium Concentration: 0,064 - 200 µg/plate

Metabolic activation:

with and without metabolic

activation: Method: OECD Test Guideline 471

Result: negative

GLP: yes

CULR[™] Art Pigment for Epoxy – Fuchsia Pink Tradename:

Test Type: Chromosome aberration test in vitro

page 9/21

Test system: Human lymphocytes Concentration: 1 - 40 µg/ml

Metabolic activation:

with and without metabolic

activation: Method: OECD Test Guideline 473

Result: positive

GLP: yes

Genotoxicity in vivo: Test Type: Other

Species: Rat (male) Strain: wistar

Cell type: Liver cells

Application Route: Ingestion Exposure time: single dose Dose: 560 - 1400 mg/kg

Method: OECD Test Guideline 486

Result: negative

GLP: yes

Test Type: Micronucleus test Species: Mouse (male and female)

Strain: CD1

Cell type: Bone marrow Application Route: Ingestion Exposure time: single dose

Dose: 125-250-500-1000-2000-5000mg/kg

Method: OECD Test Guideline 474

Result: negative

GLP: yes

Germ cell mutagenicity-

Assessment: Did not show mutagenic effects in animal experiments.

Informations related to the component mixture of: 5-chloro-2-methyl-2H-isothiazol-3-one and

2-methyl-2H-isothiazol-3-one(3:1):

Genotoxicity in vitro: Test Type: In vitro study

Metabolic activation:

with and without metabolic

activation: Result: Conflicting results have been seen in different

studies.

Genotoxicity in vivo: Test Type: Micronucleus test

Species: Rat

Cell type: Bone marrow Application Route: Oral Exposure time: ≤ 5 d Dose: $1-5 \times 28 \text{ mg/kg}$

Result: negative

Test Type: Micronucleus test

Species: Mouse Application Route: Oral Exposure time: ≤ 5 d Dose: $1-5 \times 20 - 30 \text{ mg/kg}$

Result: negative

Germ cell mutagenicity-

Assessment: In vivo tests did not show mutagenic effects

Tradename: CULR[™] Art Pigment for Epoxy – Fuchsia Pink page 10/21

Carcinogenicity

Informations related to the product:

Carcinogenicity -

Assessment: No information available.

Informations related to the component 1,2-Benzisothiazol-3(2H)-one:

Carcinogenicity -

Assessment: Not applicable

<u>Informations related to the component mixture of: 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one(3:1):</u>

Carcinogenicity -

Assessment: No evidence of carcinogenicity in animal studies.

Reproductive toxicity

Informations related to the product:

Reproductive toxicity -

Assessment: No information available.

Informations related to the component 1,2-Benzisothiazol-3(2H)-one:

Effects on fertility: Species: Rat, male

Application Route: oral (fed) Dose: 18,5 - 97,8 mg/kg

General Toxicity - Parent: NOAEL: 18,5 mg/kg

body weight

General Toxicity F1: NOAEL: 48 mg/kg body weight

Method: Other GLP: yes

Species: Rat, female Application Route: oral (feed) Dose: 27,0 - 114,8 mg/kg

General Toxicity - Parent: NOAEL: 27 mg/kg

body weight

General Toxicity F1: NOAEL: 56,6 mg/kg body weight

Method: Other GLP: yes

Effects on foetal development: Species: Rat, female

Application Route: oral (gavage) Dose: 10 - 40 - 100 mg/kg

General Toxicity Maternal: NOAEL: 10 mg/kg

body weight

Teratogenicity: NOAEL: 40 mg/kg body weight Method: Directive 67/548/EEC, Annex V, B.31.

GLP: yes

Reproductive toxicity - Assessment: No evidence of adverse effects on sexual function

and fertility, or on development, based on animal

experiments.

Embryotoxicity classification not possible from current

data.

<u>Informations related to the component mixture of: 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one(3:1):</u>

Effects on fertility: Species: Rat, male and female

Application Route: Drinking water

Dose: 25 - 75 - 225 ppm

General Toxicity - Parent: NOAEL: 16,3 - 24,7 mg/kg

body weight

General Toxicity F1: NOAEL: 16,3 - 24,7 mg/kg

body weight

Tradename: CULR[™] Art Pigment for Epoxy – Fuchsia Pink page 11/21

Method: Other GLP: yes

Species: Rat, male and female Application Route: Drinking water

Dose: 30 - 100 - 300 ppm

General Toxicity - Parent: NOAEL: 2,8 - 4,4 mg/kg

body weight

General Toxicity F1: NOAEL: 22,7 - 28 mg/kg

body weight

General Toxicity F2: NOAEL: 35,7 - 39,1 mg/kg

body weight

Method: OECD Test Guideline 416

GLP: yes

Effects on foetal development: Species: Rat, male and female

Application Route: oral (gavage)

Dose: ≤ 15 mg/kg

Developmental Toxicity: NOAEL: 15 mg/kg body weight

Method: Other

Species: Rat, male and female Application Route: oral (gavage)

General Toxicity Maternal: NOAEL: ≤ 3,95 mg/kg

body weight Method: Other

Reproductive toxicity – Assessment: Weight of evidence does not support classification for

reproductive toxicity

Embryotoxicity classification not possible from current

data.

STOT - single exposure

Informations related to the component product:

Remarks: no data available

Informations related to the component 1,2-Benzisothiazol-3(2H)-one:

Assessment: The substance or mixture is not classified as specific

target organ toxicant, single exposure.

Informations related to the component mixture of: 5-chloro-2-methyl-2H-isothiazol-3-one and

2-methyl-2H-isothiazol-3-one(3:1):

Assessment: The substance or mixture is not classified as specific

target organ toxicant, single exposure.

STOT - repeated exposure

Informations related to the component product:

Remarks: no data available

Informations related to the component 1,2-Benzisothiazol-3(2H)-one:

Assessment: The substance or mixture is not classified as specific

target organ toxicant, repeated exposure.

Informations related to the component mixture of: 5-chloro-2-methyl-2H-isothiazol-3-one and

2-methyl-2H-isothiazol-3-one(3:1):

Assessment: The substance or mixture is not classified as specific

target organ toxicant, repeated exposure.

Repeated dose toxicity

Informations related to the product:

Remarks: This information is not available.

<u>Informations related to the component 1,2-Benzisothiazol-3(2H)-one:</u>

Species: Dog, male and female

NOAEL: 5 mg/kg

Tradename: CULR[™] Art Pigment for Epoxy – Fuchsia Pink

LOAEL: 20 mg/kg

Application Route: oral (gavage)

page 12/21

Exposure time: 90 d Number of exposures: daily Dose: 5 - 20 - 50 mg/kg

Group: yes

Method: 88/302/EC

GLP: yes

Informations related to the component mixture of: 5-chloro-2-methyl-2H-isothiazol-3-one and

2-methyl-2H-isothiazol-3-one(3:1):

Species: Rat, male and female

NOAEL: 16,3 - 24,7 mg/kg ApplicationRoute: Drinking water

Exposure time: 90 d Number of exposures: daily Dose: 25 - 75 - 225 ppm

Group: yes Method: Other GLP: yes

Aspiration toxicity

Informations related to the product:

no data available

Informations related to the component 1,2-Benzisothiazol-3(2H)-one:

No aspiration toxicity classification

Informations related to the component mixture of: 5-chloro-2-methyl-2H-isothiazol-3-one and

<u>2-methyl-2H-isothiazol-3-one(3:1):</u>
No aspiration toxicity classification

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity:

Informations related to the product:

Toxicity to fish: Remarks: no data available

Toxicity to daphnia and other

aquatic invertebrates: Remarks: no data available Remarks: no data available

Informations related to the component Alcohols, C16-18 and C18-unsaturated, ethoxylated:

M-Factor

(Acute aquatic toxicity): 1

Ecotoxicology Assessment

Acute aquatic toxicity: Very toxic to aquatic life.

Chronic aquatic toxicity: Harmful to aquatic life with long lasting effects.

Informations related to the component 1,2-Benzisothiazol-3(2H)-one:

Toxicity to fish: LC50 (Oncorhynchus mykiss (rainbow trout)): 2,18 mg/l

Exposure time: 96 h
Test Type: static test
Analytical monitoring: yes

Method: OECD Test Guideline 203

GLP: yes

LC50 (Cyprinodon variegatus (sheepshead minnow)):

approx.16,7 mg/l Exposure time: 96 h

Tradename: CULR[™] Art Pigment for Epoxy – Fuchsia Pink

page 13/21

Test Type: static test Analytical monitoring: yes

Method: No information available.

GLP: yes

Toxicity to daphnia and other aquatic invertebrates:

EC50 (Daphnia magna (Water flea)): 2,94 mg/l

Exposure time: 48 h Test Type: static test Analytical monitoring: yes

Method: OECD Test Guideline 202

GLP: yes

EC0 (Daphnia magna (Water flea)): 0,643 mg/l

Exposure time: 48 h Test Type: static test Analytical monitoring: yes

Method: OECD Test Guideline 202

GLP: yes

EC50 (Mysidopsis bahia (opossum shrimp)): 0,9893 mg/l

Exposure time: 96 h
Test Type: static test
Analytical monitoring: yes

Method: Other GLP: yes

Remarks: salt water

NOEC (Mysidopsis bahia (opossum shrimp)): 0,25 mg/l

Exposure time: 96 h
Test Type: static test
Analytical monitoring: yes

Method: Other GLP: yes

Remarks: salt water

EC50 (Selenastrum capricornutum (green algae)):

0,155 mg/l

End point: Growth rate Exposure time: 72 h Analytical monitoring: yes

Method: OECD Test Guideline 201

GLP: yes

NOEC (Selenastrum capricornutum (green algae)):

0,055 mg/l

End point: Growth rate Exposure time: 72 h Analytical monitoring: yes

Method: OECD Test Guideline 201

GLP: yes

M-Factor

Toxicity to algae:

(Acute aquatic toxicity): 1

Toxicity to microorganisms: EC50 (activated sludge of a predominantly domestic

sewage): 23 mg/l

End point: Bacteria toxicity (respiration inhibition)

Exposure time: 3 h
Test Type: aquatic
Analytical monitoring: no

Method: OECD Test Guideline 209

GLP: yes

Tradename: CULR[™] Art Pigment for Epoxy – Fuchsia Pink

page 14/21

Remarks: The details of the toxic effect relate to the nominal concentration.

EC50: > 811,5 mg/kg dry weight (d.w.)

Exposure time: 28 d Test Type: Soil

Analytical monitoring: yes Method: OECD 216

GLP: yes

Remarks: The details of the toxic effect relate to the

nominal concentration.

NOEC: 263,7 mg/kg dry weight (d.w.)

Exposure time: 28 d Test Type: Soil

Analytical monitoring: yes Method: OECD 216

GLP: yes

Remarks: The details of the toxic effect relate to the

nominal concentration.

Toxicity to fish

(Chronic toxicity): NOEC: 0,21 mg/l Exposure time: 28 d

Species: Oncorhynchus mykiss (rainbow trout)

Analytical monitoring: yes

Method: OECD Test Guideline 215

GLP: yes

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity):

NOEC: 1,2 mg/l

End point: Reproduction rate

Exposure time: 21 d

Species: Daphnia magna (Water flea)

Analytical monitoring: yes

Method: OECD Test Guideline 211

GLP: yes

NOEC: 1,9 mg/l

End point: Reproduction rate

Exposure time: 21 d

Species: Daphnia magna (Water flea)

Analytical monitoring: yes

Method: OECD Test Guideline 211

GLP: yes

Toxicity to soil dwelling organisms:

Test Type: artificial soil LC50: > 410,6 mg/kg Exposure time: 14 d End point: mortality

Species: Eisenia fetida (earthworms) Method: OECD Test Guideline 207

GLP:yes

Remarks: The details of the toxic effect relate to the

nominal concentration.

Test Type: artificial soil NOEC: 234,5 mg/kg Exposure time: 14 d

CULR[™] Art Pigment for Epoxy – Fuchsia Pink Tradename: page 15/21

End point: mortality

Species: Eisenia fetida (earthworms) Method: OECD Test Guideline 207

GLP:yes

Remarks: The details of the toxic effect relate to the

nominal concentration.

EC50: 340 mg/kg Plant toxicity: Exposure time: 20 d

End point: Growth

Species: Phaseolus vulgaris Analytical monitoring: yes Method: OECD Guide-line 208

GLP:yes

Remarks: The details of the toxic effect relate to the

nominal concentration.

NOEC: 90 mg/kg Exposure time: 20 d End point: Growth

Species: Phaseolus vulgaris Analytical monitoring: yes Method: OECD Guide-line 208

GLP:ves

Remarks: The details of the toxic effect relate to the

nominal concentration.

EC50: 300 mg/kg Exposure time: 19 d End point: Growth

Species: Triticum aestivm (wheat) Analytical monitoring: yes Method: OECD Guide-line 208

GLP: yes

Remarks: The details of the toxic effect relate to the

nominal concentration.

NOEC: 51 mg/kg Exposure time: 19 d End point: Growth

Species: Triticum aestivm (wheat)

Analytical monitoring: yes Method: OECD Guide-line 208

GLP:yes

Remarks: The details of the toxic effect relate to the

nominal concentration. Remarks: not available

Sediment toxicity: Ecotoxicology Assessment

Acute aquatic toxicity:

Very toxic to aquatic life.

Chronic aquatic toxicity: Toxic to aquatic life with long lasting effects.

Informations related to the component mixture of: 5-chloro-2-methyl-2H-isothiazol-3-one and

2-methyl-2H-isothiazol-3-one(3:1):

EC50 (Oncorhynchus mykiss (rainbow trout)): 0,22 mg/l

Exposure time: 96 h

Method: OECD Test Guideline 203

Toxicity to daphnia and other

Toxicity to fish:

aquatic invertebrates: EC50 (Daphnia magna (Water flea)): 0,1 mg/l

Exposure time: 48 h

Method: OECD Test Guideline 202

Tradename: CULR[™] Art Pigment for Epoxy – Fuchsia Pink page 16/21

Toxicity to algae: EC50 (Skeletonema costatum (marine diatom)):

0,0052 mg/l Exposure time: 48 h Test Type: static test

Method: OECD Test Guideline 201

NOEC (Skeletonema costatum (marine diatom)):

0,00049 mg/l Exposure time: 48 h Test Type: static test

Method: OECD Test Guideline 201

M-Factor

(Acute aquatic toxicity): 100

Toxicity to microorganisms: EC50 (activated sludge): 7,92 mg/l

Exposure time: 3 h

Method: OECD Test Guideline 209

Toxicity to fish

(Chronic toxicity): NOEC: 0,098 mg/l

Exposure time: 28 d

Species: Oncorhynchus mykiss (rainbow trout)

Method: OECD Test Guideline 215

Toxicity to daphnia and other aquatic invertebrates

(Chronic toxicity): NOEC: 0,004 mg/l

Exposure time: 21 d

Species: Daphnia magna (Water flea) Method: OECD Test Guideline 202

M-Factor

(Chronic aquatic toxicity): 10

Toxicity to soil dwelling

organisms: LC50: 86,6 mg/kg dry weight (d.w.)

Exposure time: 14 d

Species: Eisenia fetida (earthworms) Method: OECD Test Guideline 207 NOEC: 8,83 mg/kg dry weight (d.w.)

Exposure time: 14 d

Species: Eisenia fetida (earthworms)

OECD Test Guideline 207

Ecotoxicology Assessment

Acute aquatic toxicity: Very toxic to aquatic life.

Chronic aquatic toxicity: Very toxic to aquatic life with long lasting effects.

12.2. Persistence and degradability

Informations related to the product:

Biodegradability: no data available

<u>Informations related to the component 1,2-Benzisothiazol-3(2H)-one:</u>

Biodegradability: Test Type: aerobic

Inoculum: activated sludge Concentration: 1 mg/l

Result: Partially biodegradable.

Exposure time: 63 d

Method: OECD Test Guideline 301C

GLP: yes

Physico-chemical removability: Remarks: Biodegradable

Stability in water: Test Type: abiotic

Degradation half life: 219 d

Tradename: CULR[™] Art Pigment for Epoxy – Fuchsia Pink

pH: 4

Hydrolysis: at 50 °C

Method: OECD Test Guideline 111

page 17/21

GLP: yes

Test Type: abiotic

Degradation half life: > 200 d

pH: 7

Hydrolysis: at 50 °C

Method: OECD Test Guideline 111

GLP: yes

Test Type: abiotic

Degradation half life: 145 d

pH: 9

Hydrolysis: at 50 °C

Method: OECD Test Guideline 111

GLP: yes

Photodegradation: Test Type: water

Light source: Xenon lamp Light spectrum: 290 - 400 nm

Degradation (direct photolysis): < 1,5 %

GLP: yes

Test Type: air Method: calculated

GLP: no

Remarks: Decomposes rapidly in contact with light.

Informations related to the component mixture of: 5-chloro-2-methyl-2H-isothiazol-3-one and

2-methyl-2H-isothiazol-3-one(3:1):

Biodegradability: Test Type: aerobic

Inoculum: activated sludge Result: Not rapidly biodegradable Method: OECD Test Guideline 301B

Photodegradation: Test Type: water

Light source: Sunlight

12.3. Bioaccumulative potential

Informations related to the product:

Bioaccumulation: no data available

Informations related to the component 1,2-Benzisothiazol-3(2H)-one:

Bioaccumulation: Species: Lepomis macrochirus (Bluegill sunfish)

Exposure time: 56 d Concentration: 0,1 mg/l

Bioconcentration factor (BCF): 6,62 Method: OECD Test Guideline 305

GLP: no

Remarks: Due to the distribution coefficient n-octanol/water,accumulation in organisms is

not expected.

Informations related to the component mixture of: 5-chloro-2-methyl-2H-isothiazol-3-one and

2-methyl-2H-isothiazol-3-one(3:1):

Bioaccumulation: Bioconcentration factor (BCF): 3,6

Method: calculated

Remarks: Does not accumulate in organisms.

Partition coefficient

n-octanol/water: log Pow: -0,71 - 0,75

Method: OECD Test Guideline 107

Tradename: CULR[™] Art Pigment for Epoxy – Fuchsia Pink page 18/21

12.4. Mobility in soil

<u>Informations related to the component 1,2-Benzisothiazol-3(2H)-one:</u>

Distribution among

environmental compartments: Adsorption/Soil

Medium: water – soil Koc: 235 – 566 Method: Other

12.5. Results of PBT and vPvB assessment

Informations related to the product:

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0,1 % or higher.

Informations related to the component 1,2-Benzisothiazol-3(2H)-one:

Assessment: The substance is not identified as a PBT or as a vPvB

substance.

Informations related to the component mixture of: 5-chloro-2-methyl-2H-isothiazol-3-one and

2-methyl-2H-isothiazol-3-one(3:1):

Assessment: This substance is not considered to be persistent,

bioaccumulating and toxic (PBT).

12.6. Other adverse effects

Informations related to the product:

Environmental fate and pathways: no data available Additional ecological information: no data available

Informations related to the component 1,2-Benzisothiazol-3(2H)-one:

Environmental fate and pathways: not available

Additional ecological information: Do not allow to enter ground water, waterways or

waste water.

Informations related to the component mixture of: 5-chloro-2-methyl-2H-isothiazol-3-one and

2-methyl-2H-isothiazol-3-one(3:1):

Additional ecological information: The product should not be allowed to enter drains,

watercourses or the soil.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Product:

Dispose of in accordance with the European Directives on waste and hazardous waste.

Uncleaned packaging:

This material and its container must be disposed of in a safe way.

SECTION 14: TRANSPORT INFORMATION

14.1. to 14.5.

ADR: not restricted ADN: not restricted RID: not restricted IATA: not restricted IMDG: not restricted

14.6. Special precautions for users

See sections 6 to 8 of this Safety Data Sheet.

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

No transport as bulk according IBC-Code.

CULR[™] Art Pigment for Epoxy – Fuchsia Pink Tradename: page 19/21

SECTION 15: REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

REACH - Candidate List of Substances of

Very High Concern for Authorisation (Article 59): Not applicable

REACH - List of substances subject to authorisation

(Annex XIV): Not applicable

Regulation (EC) No 1005/2009 on substances that

deplete the ozone layer: Not applicable

Regulation (EC) No 850/2004 on persistent

organic pollutants: Not applicable

Other regulations:

Apart from the data/regulations specified in this chapter, no further information is available concerning safety, health and environmental protection.

15.2. Chemical safety assessment

No Chemical Safety Assessment (CSA) is yet available for the substance, or for the component substances, contained in this product.

SECTION 16: OTHER INFORMATION

Observe the legal requirements nationally and locally.

List of the text of the hazard statements mentioned section 3 (H-phrases):

H301 Toxic if swallowed. H302 Harmful if swallowed. H310 Fatal in contact with skin.

H314 Causes severe skin burns and eye damage.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction. Causes serious eye damage. H318

H330 Fatal if inhaled.

H400 Very toxic to aquatic life.

Very toxic to aquatic life with long lasting effects. H410 Toxic to aquatic life with long lasting effects. H411 Harmful to aquatic life with long lasting effects. H412

Full text of other abbreviations

Acute toxicity Acute Tox.:

Aquatic Acute: Short-term (acute) aquatic hazard Aquatic Chronic: Long-term (chronic) aquatic hazard

Eve Dam.: Serious eye damage Skin Corr.: Skin corrosion Skin Irrit.: Skin irritation Skin Sens.: Skin sensitisation

Specific target organ toxicity - repeated exposure STOT RE:

Change compared to the previous version:

Change in the composition

Legend

ADN European Agreement concerning the International Carriage of

Dangerous Goods by Inland Waterways

ADR European Agreement concerning the International Carriage of

Dangerous Goods by Road

AICS Australian Inventory of Chemical Substances American Society for the Testing of Materials ASTM

Body weight bw

Tradename: CULR[™] Art Pigment for Epoxy – Fuchsia Pink page 20/21

CLP Classification Labelling Packaging Regulation Regulation (EC) No 1272/2008 Carcinogen, Mutagen or Reproductive Toxicant CMR Standard of the German Institute for Standardisation DIN Derived Minimal Effect Level (genotoxic substances) **DMEL DNEL** Derived No Effect Level DSL Domestic Substances List (Canada) **European Chemicals Agency ECHA** European Community number **EC-Number** ECx Concentration associated with x% response Loading rate associated with x% response ELx **EmS Emergency Schedule ENCS** Existing and New Chemical Substances (Japan) Concentration associated with x% growth rate response ErCx GHS Globally Harmonized System GLP **Good Laboratory Practice IARC** International Agency for Research on Cancer International Air Transport Association IATA **IBC** International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk IC50 Half maximal inhibitory concentration International Civil Aviation Organization **ICAO** Inventory of Existing Chemical Substances in China **IECSC** International Maritime Dangerous Goods IMDG International Maritime Organization IMO **ISHL** Industrial Safety and Health Law (Japan) ISO International Organisation for Standardization **KECI** Korea Existing Chemicals Inventory LC50 Lethal Concentration to 50 % of a test population Lethal Dose to 50% of a test population (Median Lethal Dose) LD50 International Convention for the Prevention of Pollution from Ships **MARPOL** Not Otherwise Specified n.o.s. No Observed (Adverse) Effect Concentration NO(A)EC No Observed (Adverse) Effect Level NO(A)EL **NOELR** No Observable Effect Loading Rate **NZIoC** New Zealand Inventory of Chemicals Organization for Economic Co-operation and Development **OECD OPPTS** Office of Chemical Safety and Pollution Prevention Persistent, Bioaccumulative and Toxic substance PBT **PICCS** Philippines Inventory of Chemicals and Chemical Substances (Quantitative) Structure Activity Relationship (Q)SAR RÉACH Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals RID Regulations concerning the International Carriage of Dangerous Goods by Rail SADT Self-Accelerating Decomposition Temperature

SDS Safety Data Sheet

TCSI Taiwan Chemical Substance Inventory
TRGS Technical Rule for Hazardous Substances
TSCA Toxic Substances Control Act (United States)

UN United Nations

vPvB Very Persistent and Very Bioaccumulative

Tradename: CULR[™] Art Pigment for Epoxy – Fuchsia Pink

page 21/21

Revision Date: 04/02/2019

Decimal notation: "thousands" places are identified with a dot (for example, "2.000 mg/kg" means "two thousand mg/kg"). Decimal places are identified with a comma (for example, "1,35 g/cm³" means "one point three five g/cm³").

This information corresponds to the present state of our knowledge and is intended as a general description of our products and their possible applications. Easy Composites Ltd makes no warranties, express or implied, as to the information accuracy, adequacy, sufficiency or freedom from defect and assumes no liability in connection with any use of this information. Any user of this product is responsible for determining the suitability of CULR products for its particular application. Nothing included in this information waives any of Easy Composite's General Terms and Conditions of Sale, which control unless it agrees otherwise in writing.

Any existing intellectual/industrial property rights must be observed. Due to possible changes in our products and applicable national and international regulations and laws, the status of our products could change. Material Safety Data Sheets providing safety precautions, that should be observed when handling or storing CULR products, are available upon request and are provided in compliance with applicable law. You should obtain and review the applicable Material Safety Data Sheet information before handling any of these products.

For additional information, please contact Easy Composites Ltd.

SAFETY DATA SHEET



in acc. with Regulation (EU) No. 2015/830 Revision Date: 04/02/2019

Tradename: CULR[™] Art Pigment for Epoxy – Polished Gold page 1/14

SECTION 1: IDENTIFICATION OF SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

1.1. Product identifier

Tradename: CULR™ Art Pigment for Epoxy - Polished Gold

1.2. Relevant identified uses of the substances or mixture and uses advised against

Relevante identified uses of the substance or mixture

Industry sector: Industrial Performance Chemicals

Paints, lacquers and varnishes industry

Polymers industry Printing Inks Industry Colourant preparation

Type of use: Colourant preparation

1.3. Details of the supplier of the safety data sheet

Identification of the company:

Easy Composites Ltd

Unit 39 Park Hall Business Village

Stoke on Trent, ST3 5XA. United Kingdom.

Phone: +44 (0)1782 454499 Information to substance / mixture:

Division: Technical

E-mail: technical@glasscastresin.com

1.4. Emergency telephone number

Emergency CONTACT (Office Hours) Phone: +44 (0)1782 454499

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance / mixture

Classification (REGULATION (EC) No 1272/2008):

Acute toxicity, Catergory 4	H302	Harmful if swallowed
Eye irritation, Category 2	H319	Causes serious eye irritation
Acute aquatic toxicity, Category 1	H400	Very toxic to aquatic life
Chronic aquatic toxicity, Category 1	H410 effects	Very toxic to aquatic life with long lasting

2.2. Label elements

Labeling (REGULATION (EC) No 1272/2008):

Hazard pictograms:



Signal word: Warning

Hazard statements: H302 Harmful if swallowed.

H319 Causes serious eye irritation.

H410 Very toxic to aquatic life with long lasting effects.

Tradename: CULR[™] Art Pigment for Epoxy – Polished Gold page 2/14

Precautionary statements: Prevention:

P264 Wash skin thoroughly after handling. P273 Avoide release tot he environment. P280 Wear eye protection/ face protection.

Response:

P337 + P313 If eye irritation persists: Get medical advice /

attention.

P391 Collect spillage.

Disposal:

P501 Dispose of contents / container to an approved

waste disposal plant.

Hazard components which must be listed on the label:

Copper

2.3. Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SECTION 3: COMPOSITION / INFORMATION TO INGREDIENTS

3.1. Mixtures

Hazardous components

Chemical Name	CAS-No. EC-No. INDEX No. Registration No.	Classification (Regulation (EC) Nr. 1272/2008)	Concentration %
copper	7440-50-8 231-159-6 01-2119480154-42	Acute Tox. 4; H302 Eye Irrit. 2; H319 Aquatic Acute 1; H400 Aquatic Chronic 1; H410	≥ 25 - ≤ 50
Zinc powder – zinc dust (stabilized)	7440-66-6 231-175-3 030-001-00-1 01-2119467174-37	Aquatic Acute 1; H400 Aquatic Chronic 1; H410	≥ 2,5 - ≤ 10
salt of polyamineamide	Not Assigned	Skin Irrit. 2; H315	≥ 1 - ≤ 10

The full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: FIRST AID MEASURES

4.1. Discription of first aid measures

General advice:

Move the victim to fresh air.

Move out of dangerous area.

Show this safety data sheet to the doctor in attendance.

If inhaled:

If unconscious place in recovery position and seek medical advice.

If symptoms persisit, call a physician.

In case of skin contact:

Wash of immediately with soap and a plenty of water.

If skin irritation persists, call a physician.

If on skin, rinse well with water.

If on clothes, remove clothes.

page 3/14

Tradename: CULR[™] Art Pigment for Epoxy – Polished Gold

In case of eye contact:

Immediately flush eyes with water as a plenty of water.

Remove contact lenses.

Keep eye wide open while rinsing.

If eye irritation persists, consult a specialist.

If swallowed:

Keep resperatory tract clear.

Do not give milk or alcoholic beverages.

Never give anything by mouth to an unconscious person.

If symptoms persist call a physician.

4.2. Most important symptoms and effects, both acute and delayed symptoms

Risks:

Harmful if swallowed.

Causes serious eye irritation.

4.3. Indication of any immediate medical attention and special treatment needed

This information is not available.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media:

Suitable extinguishing media:

Dry sand

special powder against metal fire

ABC-Powder

Extinction agents, not suitable out of safety reasons:

Water

High volume water jet

5.2. Special hazards arising from the substance or mixture

Specific hazards during firefighting:

Do not allow run-off from the fire fighting to enter drains or water courses.

5.3. Advice for firefighters

Special protective equipment for firefighting:

Wear self contained breathing apparatus for the fire fighting if necessary.

Further information:

Collect contaminated fire extinguishing water separately.

This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

Standart procedure for chemical fires.

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Evacuate personal to save areas.

Ensure adequate ventilation.

Use personal protective equipment.

6.2. Environment precautions

Prevent product from entering drains.

Prevent further leakage or spillage if safe to do so.

If the product contaminates rivers and lakes or drains inform respective authorities.

6.3. Methods and material for containment and cleaning up

Use mechanical handling equipment.

Pick up and transfer to properly labelled containers.

Tradename: CULR[™] Art Pigment for Epoxy – Polished Gold

page 4/14

Do not flush with water.

Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).

Keep in suitable, closed containers for disposal.

6.4. Cross Reference to other sections

Additional information:

For personal protection see Section 8.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Advice on safe handling:

Do not breath vapours/dust.

Avoid contact with skin and eyes.

For personal protection see Section 8.

Smoking, eating, drinking should be prohibited in the application area.

Dispose of rinse water in accordance with local and national regulations.

Advice on protection against fire and explosion:

Normal measures for preventive fire protection.

Keep away from heat an sources of ignition.

No smoking.

Hygiene measures:

When using do not eat or drink.

When using do not smoke.

Wash hands before breaks and the end of workday.

General industrial hygiene practice.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers:

Keep away from sources of ignition - No smoking.

Do not store near combustible materials.

Keep containers tightly closed in a cool, well-ventilated place.

To maintain product quality, do not store in heat or direct sunlight.

Keep container tightly closed in a dry and well-ventilated place.

Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Electrical installations / working materials must comply with the technological safety standards.

Further information on storage conditions:

Protect from humidity and water.

Storage stability:

Storage stability of at least 18 month.

Advice on common storage:

Keep away from oxidizing agents, strongly alkaline and strongly acid materials in order to avoid exothermic reactions.

Do not store together with oxidizing and self-igniting products.

Dampness:

Keep in a dry, cool and well-ventilated place.

Further information on storage stability:

No decomposition if stored and applied as directed.

7.3. Specific end use(s)

This information is not available.

Tradename: CULR[™] Art Pigment for Epoxy – Polished Gold page 5/14

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1. Control parameters

Occupational Exposure Limits

Occupational Exposure Limits					
Components	CAS.No.:	Value type (Form of exposure)	Control- parameters	Basis (Version Date)	
copper	7440-50-8	TWA (Fumes)	0,2 mg/m ³ (Copper)	GB EH40 (2011-12-01)	
		Einatembare Fraktion			
		TWA (Dusts and mists)	1 mg/m³ (Copper)	GB EH40 (2011-12-01)	
		STEL (Dusts and mists)	2 mg/m ³ (Copper)	GB EH40 (2011-12-01)	
zinc powder - zinc dust (stabilized)	7440-66-6	TWA (Inhalable)	10 mg/m ³	GB EH40 (2011-12-01)	
		Einatembare Fraktion			
Further information	The COSHH definition of a substance hazardous to health includes dust of any kind when present at a concentration in air equal to or greater than 10 mg/m³ 8-hour TWA of inhalable dust or 4 mg/m³ 8-hour TWA of respirable dust. This means that any dust will be subject to COSHH if people are exposed above these levels. Some dusts have been assigned specific WELs and exposure to these must comply with the appropriate limit. Where no specific short-term exposure limit is listed, a figure three times the long-term exposure should be used.				
		TWA (Respirable)	4 mg/m ³	GB EH40 (2011-12-01)	
Further information	The COSHH definition of a substance hazardous to health includes dust of any kind when present at a concentration in air equal to or greater than 10 mg/m³ 8-hour TWA of inhalable dust or 4 mg/m³ 8-hour TWA of respirable dust. This means that any dust will be subject to COSHH if people are exposed above these levels. Some dusts have been assigned specific WELs and exposure to these must comply with the appropriate limit. Where no specific short-term exposure limit is listed, a figure three times the long-term exposure should be used.				
silicon dioxide	7631-86-9	TWA (Inhalable)	6 mg/m ³	GB EH40 (2007-08-01)	
Further information	For the purposes of these limits, respirable dust and inhalable dust are those fractions of airborne dust which will be collected when sampling is undertaken in accordance with the methods described in MDHS14/3 General methods for sampling and gravimetric analysis of respirable and inhalable dust, The COSHH definition of a substance hazardous to health includes dust of any kind when present at a concentration in air equal to or greater than 10 mg/m³ 8-hour TWA of inhalable dust or 4 mg/m³ 8-hour TWA of respirable dust. This means that any dust will be subject to COSHH if people are exposed above these levels. Some dusts have been assigned specific WELs and exposure to these must comply with the appropriate limit. Most industrial dusts contain particles of a wide range of sizes. The behaviour, deposition and fate of any particular particle after entry into the human respiratory system and the body				

Tradename: CULR[™] Art Pigment for Epoxy – Polished Gold

page 6/14

response that it elicits, depend on the nature and size of the particle. HSE distinguishes two size fractions for limit-setting purposes termed 'inhalable' and 'respirable'., Inhalable dust approximates to the fraction of airborne material that enters the nose and mouth during breathing and is therefore available for deposition in the respiratory tract. Respirable dust approximates to the fraction that penetrates to the gas exchange region of the lung. Fuller definitions and explanatory material are given in MDHS14/3., Where dusts contain components that have their own assigned WEL, all the relevant limits should be complied with., Where no specific short-term exposure limit is listed, a figure three times the long-term exposure should be used.

TWA	2,4 mg/m ³	GB EH40
(Respirable)	_	(2007-08-01)

Further information

For the purposes of these limits, respirable dust and inhalable dust are those fractions of airborne dust which will be collected when sampling is undertaken in accordance with the methods described in MDHS14/3 General methods for sampling and gravimetric analysis of respirable and inhalable dust, The COSHH definition of a substance hazardous to health includes dust of any kind when present at a concentration in air equal to or greater than 10 mg/m³ 8-hour TWA of inhalable dust or 4 mg/m³ 8-hour TWA of respirable dust. This means that any dust will be subject to COSHH if people are exposed above these levels. Some dusts have been assigned specific WELs and exposure to these must comply with the appropriate limit., Most industrial dusts contain particles of a wide range of sizes. The behaviour, deposition and fate of any particular particle after entry into the human respiratory system and the body response that it elicits, depend on the nature and size of the particle. HSE distinguishes two size fractions for limit-setting purposes termed 'inhalable' and 'respirable'., Inhalable dust approximates to the fraction of airborne material that enters the nose and mouth during breathing and is therefore available for deposition in the respiratory tract. Respirable dust approximates to the fraction that penetrates to the gas exchange region of the lung. Fuller definitions and explanatory material are given in MDHS14/3., Where dusts contain components that have their own assigned WEL, all the relevant limits should be complied with., Where no specific short-term exposure limit is listed, a figure three times the longterm exposure should be used.

TWA	6,0 mg/m ³	GB EH40
(inhalable dust)	(Silica)	(2011-12-01)

Further information

For the purposes of these limits, respirable dust and inhalable dust are those fractions of airborne dust which will be collected when sampling is undertaken in accordance with the methods described in MDHS14/3 General methods for sampling and gravimetric analysis of respirable and inhalable dust, The COSHH definition of a substance hazardous to health includes dust of any kind when present at a concentration in air equal to or greater than 10 mg/m³ 8-hour TWA of inhalable dust or 4 mg/m³ 8-hour TWA of respirable dust. This means that any dust will be subject to COSHH if people are exposed above these levels. Some dusts have been assigned specific WELs and exposure to these must comply with the appropriate limit., Most industrial dusts contain particles of a wide range of sizes. The behaviour, deposition and fate of any particular particle after entry into the human respiratory system and the body response that it elicits, depend on the nature and size of the particle. HSE distinguishes two size fractions for limit-setting purposes termed 'inhalable' and 'respirable'., Inhalable dust approximates to the fraction of airborne material that enters the nose and mouth during breathing and is therefore available for deposition in the respiratory tract. Respirable dust approximates to the fraction that penetrates to the gas exchange region

CULR[™] Art Pigment for Epoxy – Polished Gold Tradename: page 7/14

	of the lung. Fuller definitions and explanatory material are given in MDHS14/3., Where dusts contain components that have their own assigned WEL, all the relevant limits should be complied with., Where no specific short-term exposure limit is listed, a figure three times the long-term exposure should be used.			
		TWA (Respirable dust)	2,4 mg/m ³	GB EH40 (2011-12-01)
Further information	TWA 2,4 mg/m³ GB EH40			

DNEL / DMEL Values:

Substance name	End Use	Exposure routes	Potential health effects	Value
copper	Workers	Skin contact	short term – systemic effects	273 mg/kg
	Workers	Inhalation	short term – systemic effects	20 mg/m ³
	Workers	Skin contact	long term – systemic effects	137 mg/kg
	Consumers	Skin contact	short term – systemic effects	273 mg/kg
	Consumers	Inhalation	short term – systemic effects	20 mg/m ³
zinc powder - zinc dust (stabilized)	Workers	Inhalation	long term – systemic effects	5 mg/m ³
	Workers	Skin contact	long term – systemic effects	83 mg/kg
	Consumers	Ingestion	long term – systemic effects	0,83 mg/kg

Revision Date: 04/02/2019

CULR[™] Art Pigment for Epoxy – Polished Gold Tradename:

page 8/14

Consumers	Skin contact	long term – systemic effects	83 mg/kg
Consumers	Inhalation	long term – systemic effects	2,5 mg/m ³

PNEC-Values:

Substance name	Environmental Compartment	Value	
copper	Soil	65,5	mg/kg
	Fresh water	0,0078	mg/l
	Fresh water sediment	87	mg/kg
	Marine water	0,0052	mg/l
	Marine sediment	676	mg/kg
	STP	0,230	mg/l
zinc powder - zinc dust (stabilized)	Fresh water	0,0206	mg/l
	Fresh water sediment	117,8	mg/kg
	Marine water	0,0061	mg/l
	Soil	35,6	mg/kg
	Marine sediment	56,5	mg/kg

8.2. Personal protective equipment

Eye protection:

Safety glasses

Wear face-shield and protective suit for abnormal processing problems.

Hand protection

Material: Solvent-resistant gloves (butyl-rubber)

Remarks: Take note of the information given by the producer concerning

permeability and break through times, and of special workplace

conditions (mechanical strain, duration of contact).

The exact break through time can be obtained from the protective

glove producer and this has to be observed.

Please observe the instructions regarding permeability and

breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the

contact time.

Recommended preventive skin protection.

Skin should be washed after contact.

The suitability for a specific workplace should be discussed with the

producers of the protective gloves.

Skin and body protection:

Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Respiratory protection:

Use suitable breathing protection if workplace concentration requires.

Respirator with a vapour filter (EN 141)

Environmental exposure controls 8.3

Water:

The product should not be allowed to enter drains, water courses or the soil.

page 9/14

Tradename: CULR[™] Art Pigment for Epoxy – Polished Gold

Section 9: Physical and chemical properties

9.1. Appearance

Physical state: liquid Colour: Gold

Odour: characteristic
Odour Threshold: No data available
pH: No data available
Freezing point: No data available

Boiling point/boiling range: $> 100 \,^{\circ}\text{C}$ Flash point: $> 100 \,^{\circ}\text{C}$

Evaporation rate: No data available Flammability (solid, gas): No data available Self-ignition: No data available Auto-ignition temperature: No data available Smoldering temperature: No data available Decomposition temperature: No data available Explosive properties: No data available Oxidizing properties: No data available

Upper explosion limit /

Upper flammability limit: No data available

Lower explosion limit /

Lower flammability limit:

Relative vapour density:

Relative density:

No data available

Solubility(ies)

Water solubility: insoluble

Solubility in other solvents: No data available

Partition coefficient:

n-octanol/water:

Decomposition temperature:

Viscosity, dynamic:

Viscosity, kinematic:

Flow time:

No data available

No data available

No data available

No data available

9.2. Other information

No data available

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

No decomposition if stored and applied as directed.

10.2. Chemical Stability

No decomposition if stored and applied as directed.

10.3. Possibility of hazardous reactions

Hazardous reactions:

No decomposition if stored and applied as directed. Stable under recommended storage conditions.

10.4. Conditions to avoid

No data available.

Do not allow evapouration to dryness.

Safety Data Sheet

in acc. with Regulation (EU) No. 2015/830 Revision Date: 04/02/2019

Tradename: CULR[™] Art Pigment for Epoxy – Polished Gold page 10/14

10.5. Incompatible Materials

No data available.

10.6. Hazardous decomposition products

Carbon monoxide, carbon dioxide, and unburned hydrocarbons (smoke).

SECTION 11: TOXICOLOGIC INFORMATION

11.1. Acute Toxicity

Informations related to the product:

Acute oral toxicity: Acute toxicity estimate: 1,158 mg/kg

Method: Calculation method

Skin irritation: May cause skin irritation and/or dermatitis.

Serious eye damage/ eye irritation: Causes serious eye irritation.

Respiratory or skin sensitization: no data available Carcinogenicity: no data available Toxicity to reproduction/fertility no data available

Reprod.Tox./Development/

Teratog. no data available
STOT – single exposure no data available
STOT – repeated exposure no data available
Aspiration toxicity no data available

Informations related to the component copper:

Acute oral toxicity: Assessment: The component/mixture is moderately

toxic after single ingestion.

Skin irritation: May cause skin irritation in susceptible persons.

Serious eye damage/ eye irritation: Eye irritation

Informations related to the component zinc powder - zinc dust (stabilized):

Acute oral toxicity: (Rat): > 2,000 mg/kg
Acute inhalation toxicity: LC50 (Rat): 5.41 mg/l
Exposure time: 4 h

Test atmosphere: dust/mist

11.2. Additional toxicologic information

Informations related to the product:

No data available

Informations related to the component copper:

No data available

Informations related to the component zinc powder - zinc dust (stabilized):

No data available

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity:

Informations related to the component copper:

M-Factor: 10

Ecotoxicology Assessment: Acute aquatic toxicity:

Very toxic to aquatic life. Chronic aquatic toxicity:

Very toxic to aquatic life with long lasting effects.

Informations related to the component zinc powder - zinc dust (stabilized):

Ecotoxicology Assessment: Acute aquatic toxicity:

Very toxic to aquatic life.
Chronic aquatic toxicity:

Very toxic to aquatic life with long lasting effects.

Tradename: CULR[™] Art Pigment for Epoxy – Polished Gold page 11/14

12.2. Persistence and degradability

No data available

12.3. Bioaccumulative potential

No data available

12.4. Mobility in soil

No data available

12.5. Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6. Other corruptive effects

Product:

Additional ecotoxicological remarks: An environmental hazard cannot be excluded

in the event of unprofessional handling

or disposal.

Very toxic to aquatic life with long lasting effects.

<u>Informations related to the component copper:</u>

Additional ecological information: An environmental hazard cannot be excluded

in the event of unprofessional handling

or disposal.

Very toxic to aquatic life with long lasting effects.

Informations related to the component zinc powder - zinc dust (stabilized):

Additional ecological information: An environmental hazard cannot be excluded

in the event of unprofessional handling

or disposal.

Very toxic to aquatic life with long lasting effects.

Section 13: Disposal considerations

European Waste Catalogue: 08 01 11 - waste paint and varnish containing organic solvents or

other dangerous substances.

13.1. Waste treatment methods

Product:

The product should not be allowed to enter drains, water courses or the soil.

Do not contaminate ponds, waterways or ditches with chemical or used container.

Send to a licensed waste management company.

In accordance with local and national regulations.

Empty remaining contents.

Dispose of as unused products.

Do not re-use empty containers.

SECTION 14: TRANSPORT INFORMATION

14.1. UN number:

ADR: UN 3082 IATA: UN 3082 IMDG: UN 3082

14.2. UN proper shipping name

ADR: environmentally hazardous substance, liquid

N.O.S. (Copper metal powder)

IMDG: environmentally hazardous substance, liquid

N.O.S. (Copper metal powder)

page 12/14

Tradename: CULR[™] Art Pigment for Epoxy – Polished Gold

IATA: environmentally hazardous substance, liquid

N.O.S. (Copper metal powder)

14.3 Transport hazard class

ADR: 9 IMDG: 9 IATA: 9

14.4 Packing group

ADR

Packaging group: III
Classification Code: M6
Hazard identification No: 90
Labels: 9

IMDG

Packaging group: III Labels: 9

EmS Number: F-A, S-F

<u>IATA</u>

Packing instruction

(cargo aircraft): 964

Packing instruction (LQ):

(passenger aircraft) Y964
Packing instruction (LQ): Y964
Packaging group: III

Labels: Miscellaneous Dangerous Goods

14.5 Environmental hazards

ADR:

Environmentally hazards: yes

IMDG:

Marine pollutant: yes

IATA (Passenger):

Environmentally hazards: yes

IATA (Cargo):

Environmentally hazards: yes

14.6. Special precautions for users

For single packagings \leq 5L / 5 kg, or combination packagings containing inner packagings \leq 5L / 5 kg net per inner packaging, SV375 ADR, 2.10.2.7 IMDG-Code, A197 IATA-DGR may be applied.

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

SECTION 15: LEGISLATIVE PROVISIONS

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

REACH - Candidate List of Substances of

Very High Concern for Authorisation (Article 59).: Not applicable

15.2. Chemical safety assessment

This information is not available.

Tradename: CULR[™] Art Pigment for Epoxy – Polished Gold page 13/14

SECTION 16: OTHER INFORMATION

Observe national and local legal requirements

List of the text of the hazard statements mentioned section 3 (H-phrases) :

H302 Harmful if swallowed.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

Change compared to the previous version:

Change in the composition

Legend

ADN European Agreement concerning the International Carriage of

Dangerous Goods by Inland Waterways

ADR European Agreement concerning the International Carriage of

Dangerous Goods by Road

AICS Australian Inventory of Chemical Substances
ASTM American Society for the Testing of Materials

bw Body weight

CLP Classification Labelling Packaging Regulation

Regulation (EC) No 1272/2008

CMR Carcinogen, Mutagen or Reproductive Toxicant
DIN Standard of the German Institute for Standardisation
DMEL Derived Minimal Effect Level (genotoxic substances)

DNEL Derived No Effect Level

DSL Domestic Substances List (Canada)
ECHA European Chemicals Agency
EC-Number European Community number

ECx Concentration associated with x% response ELx Loading rate associated with x% response

EmS Emergency Schedule

ENCS Existing and New Chemical Substances (Japan)
ErCx Concentration associated with x% growth rate response

GHS Globally Harmonized System
GLP Good Laboratory Practice

IARC International Agency for Research on Cancer

IATA International Air Transport Association

IBC International Code for the Construction and Equipment of Ships

carrying Dangerous Chemicals in Bulk Half maximal inhibitory concentration

IC50 Half maximal inhibitory concentration ICAO International Civil Aviation Organization

IECSC Inventory of Existing Chemical Substances in China

IMDGInternational Maritime Dangerous GoodsIMOInternational Maritime OrganizationISHLIndustrial Safety and Health Law (Japan)ISOInternational Organisation for Standardization

KECI Korea Existing Chemicals Inventory

LC50 Lethal Concentration to 50 % of a test population

LD50 Lethal Dose to 50% of a test population (Median Lethal Dose)
MARPOL International Convention for the Prevention of Pollution from Ships

n.o.s. Not Otherwise Specified

NO(A)EC No Observed (Adverse) Effect Concentration

NO(A)EL No Observed (Adverse) Effect Level NOELR No Observable Effect Loading Rate NZIoC New Zealand Inventory of Chemicals

OECD Organization for Economic Co-operation and Development

OPPTS Office of Chemical Safety and Pollution Prevention

Safety Data Sheet

in acc. with Regulation (EU) No. 2015/830 Revision Date: 04/02/2019

Tradename: CULR[™] Art Pigment for Epoxy – Polished Gold page 14/14

PBT Persistent, Bioaccumulative and Toxic substance

PICCS Philippines Inventory of Chemicals and Chemical Substances

(Q)SAR (Quantitative) Structure Activity Relationship

This information corresponds to the present state of our knowledge and is intended as a general description of our products and their possible applications. Easy Composites Ltd makes no warranties, express or implied, as to the information accuracy, adequacy, sufficiency or freedom from defect and assumes no liability in connection with any use of this information. Any user of this product is responsible for determining the suitability of Easy Composites Ltd's products for its particular application. Nothing included in this information waives any of Easy Composites Ltd 's General Terms and Conditions of Sale, which control unless it agrees otherwise in writing.

Any existing intellectual/industrial property rights must be observed. Due to possible changes in our products and applicable national and international regulations and laws, the status of our products could change. Material Safety Data Sheets providing safety precautions, that should be observed when handling or storing Easy Composites Ltd products, are available upon request and are provided in compliance with applicable law. You should obtain and review the applicable Material Safety Data Sheet information before handling any of these products.

For additional information, please contact Easy Composites Ltd.