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
	_	

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

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

page 5/21

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

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 55965-84-9 CAS-Number:

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
> 100 °C

Evaporation rate:

Flammability:

Lower explosion limit:

Upper explosive limit:

Combustion number:

Minimum ignition energy:

Vapour pressure:

not determined
not applicable
not determined
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: 1,18 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 page 8/21

<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

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:

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.

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

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 Toxicity to algae: Remarks: no data available Toxicity to fish (Chronic toxicity): Remarks: no data available Toxicity to microorganisms: 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

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 – 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

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

Ecotoxicology Assessment

Sediment toxicity:

Toxicity to fish:

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 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

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):

Toxicity to soil dwelling

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

10

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

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.

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 andpathways: 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 – Fuchsia Pink 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

Tradename: CULR[™] Art Pigment for Epoxy – Fuchsia Pink page 20/21

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

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

IMDG International Maritime Dangerous Goods
IMO International Maritime Organization
ISHI Industrial Safety and Health Law (Japan)

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

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 – 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.