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# **C-SYSTEMS ET 108 component A**

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

1.1 Product Identifier

Commercial name : C-SYSTEMS ET 108 component A

UFI : VP20-M0TJ-Q00D-56JU

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

Type of application (use) : epoxy system for bonding

Usage Restrictions : Reserved for industrial and professional users.

recommended

1.3 Details of the supplier of the safety data sheet

Company : CECCHI GUSTAVO & C srl

Via M. Coppino 253 - 55049

Viareggio (LU) ITALY

Telephone : +39 0584 383694

SDS manager's email address: info@cecchi.it

### 1.4 Emergency telephone number

+ 44 1235 239670 (All languages)

CAVp "Hosp. Pediatric Bambino Gesù" Rome Piazza Sant'Onofrio, 4 00165 Tel.06-68593726

Az. Osp. Univ. Foggia Foggia V.le Luigi Pinto, 1 71122 Tel.0881-732326

Hospital "A. Cardarelli" Naples Via A. Cardarelli, 9 80131 Tel.081-7472870 CAV Policlinico

"Umberto I" Rome Viale del Policlinico, 155 00161 Tel.06-49978000 CAV Policlinico "A.

Gemelli" Rome Largo Agostino Gemelli, 8 00168 Tel.06-3054343

Hospital "Careggi" Medical Toxicology Unit Florence Largo Brambilla, 3 50134 Tel.055-7947819

CAV National Center for Toxicological Information Pavia Via Salvatore Maugeri, 10 27100

Tel.0382-24444

hosp. Niguarda Ca' Granda Milan Piazza Ospedale Maggiore,3 20162 Tel.02-66101029 Papa Giovanni XXII Hospital Bergamo Piazza OMS, 1 24127 Tel.800883300 Integrated University

Hospital (AOUI) of Verona Borgo Trento branch, Verona Tel. 800011858

### **SECTION 2: hazard identification**

#### 2.1 Classification of the substance or mixture

Classification (REGULATION (EC) N. 1272/2008) Skin

irritation, Category 2 H315: Causes skin irritation.

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Eye irritation, Category 2 H319: Causes serious eye irritation.

Skin sensitization, Category 1 H317: May cause an allergic skin reaction.

Long-term (chronic) hazard to the H411: Toxic to aquatic life with long lasting

aquatic environment, Category 2 effects.

#### 2.2 Elements of the label

### Labeling (REGULATION (EC) N. 1272/2008)

Hazard pictograms:





Warning : Attention

Warning notices : H315 Causes skin irritation.

H317 May cause an allergic skin reaction. Causes

H319 serious eye irritation.

H411 Toxic to aquatic life with long lasting effects

duration

Cautionary advice Prevention:

P261 Avoid breathing mist or vapours. WashP264 skin thoroughly after use. Do not

P273 disperse in the environment.

P280 Wear gloves/ eye protection/ eye protection

face.

**Reaction:** 

P333 + P313 If skin irritation or rash occurs:

consult a doctor. P391 Collect spillage.

#### Hazardous components to be indicated on the label:

2,2-bis-[4-(2,3-epoxypropoxy)phenyl]-propane

Reaction product of Epichlorohydrin/Bisphenol-A

1,6-bis(2,3-epoxypropoxy)hexane

#### **Additional labeling**

EUH205 Contains epoxy components. May cause an allergic reaction.

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#### 2.3 Other dangers

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at concentrations of 0.1% or higher.

Ecological information: The substance/mixture does not contain any components considered to have endocrine disrupting properties within the meaning of Article 57(f) of REACH or Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Toxicological information: The substance/mixture does not contain any components considered to have endocrine disrupting properties within the meaning of Article 57(f) of REACH or Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

# **SECTION 3: Composition/information on ingredients**

#### 3.2 Mixtures

Chemical nature : Modified epoxy resin

Components

Chemical Name	N. CAS	Classification	Concentrazion
	N. WHAT		e (% w/w)
	INDEX NO		
	Number of		
	registration		
2,2-bis-[4-(2,3-	1675-54-3	Skin Irrit. 2; H315	> = 50 - <= 100
epoxypropoxy)phenyl]-propane	216-823-5	Eye Irrit. 2; H319	
	603-073-00-2	Skin Sens. 1; H317	
	01-2119456619-26	Aquatic Chronic 2;	
		H411	
		limits of	-
		concentration	
		specific	
		Eye Irrit. 2; H319	
		> = 5 %	
		Skin Irrit. 2; H315	
		> = 5 %	
Reaction product of	25068-38-6	Skin Irrit. 2; H315	> = 10 - < 12.5
Epichlorohydrin/Bisphenol-A	23000 30 0	Eye Irrit. 2; H319	10 112,3
Epicilioi oriyariii/bispileiloi-A		Skin Sens. 1; H317	
1,6-bis(2,3-epoxypropoxy)hexane	933999-84-9	Skin Irrit. 2; H315	>=3-<5
	01-2119463471-41	Eye Irrit. 2; H319	
		Skin Sens. 1; H317	
		Aquatic Chronic 3;	
		H412	
[3-(2,3-	2530-83-8	Eye Dam. 1; H318	> = 1 - < 2,5
	219-784-2	Aquatic Chronic 3;	
epoxypropoxy)propyl]trimethoxysilan	e 01-2119513212-58	H412	

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For explanations of abbreviations see paragraph 16.

#### **SECTION 4: first aid measures**

### 4.1 Description of first aid measures General

information : Keep warm in a quiet room.

Show this safety data sheet to the attending physician. Take off all contaminated clothing immediately.

If inhaled : Take to fresh air.

Put the person concerned in a resting position and keep him

warm.

If unconscious, place on side in stable position and consult a

doctor.

If symptoms persist, consult a doctor. In case of irregular breathing or respiratory arrest, give artificial

respiration.

In case of skin contact : Wash immediately with soap and plenty of water. Do

not use solvents or thinners.

If it gets on clothing, remove clothing. If skin

irritation persists, call a doctor.

In case of contact with

eyes

Rinse immediately with plenty of water, also under the

eyelids, for at least 15 minutes.

If eye irritation persists, consult a physician. If this is easy,

remove contact lenses, if they are worn.

If ingested : Keep at rest.

Do not induce vomiting without medical advice. Keep

the respiratory tract clean.

If symptoms persist, consult a doctor.

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

Symptoms : irritant effects

Redness

sensitizing effects

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

Treatment : First Aid procedure should be agreed

consulting the competent occupational physician.

#### **SECTION 5: Firefighting measures**

#### 5.1 Extinguishing media

Suitable extinguishing media : Foam

Sand

Carbon dioxide (CO2)

Water mist

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Unsuitable extinguishing

media

: Nebulised water jet

### 5.2 Special hazards arising from the substance or mixture

Specific dangers vs

the fire

: Pressure in hermetically sealed containers can

increase under the influence of heat.

Cool closed containers near the flames with nebulised

water.

#### 5.3 Advice for firefighters

Protection devices special for firefighters

: In the event of fire, wear self-contained breathing apparatus. Use personal protective equipment.

Further information : In case of fire and/or explosion do not breathe fumes. Use

extinguishing systems compatible with the local situation and  $% \left( 1\right) =\left( 1\right) \left( 1\right$ 

the surrounding environment.

Immediately evacuate personnel to safe areas. Prevent water from fire extinguishers from contaminating surface

water or groundwater.

Dispose of the contaminated water used for extinguishing and the

residue of the fire according to the regulations in force.

## **SECTION 6: Accidental release measures**

#### 6.1 Personal precautions, protective equipment and emergency procedures

Individual precautions : Refer to protective measures listed in sections 7 and 8.

Evacuate personnel to safe areas. Use personal protective equipment.

Provide adequate ventilation.

Inform the responsible authorities in the event of a gas leak,

or if it enters pipes, soil or sewers.

### 6.2 Environmental precautions

Environmental precautions : Do not allow uncontrolled dumping of the product

in the environment.

Prevent the material from entering drains or water courses.

Local authorities must be notified if leaks cannot be

contained.

# 6.3 Methods and materials for containment and cleaning up

Methods of reclamation : Dry with inert material (e.g. sand, silica gel, acid binder,

universal binder, sawdust). Contain and collect spillage with non-combustible absorbent material (such as sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local or national regulations (see

section 13).

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Collect and transfer to a properly labeled container.

#### 6.4 Reference to other sections

See Section 8 for personal protective equipment.

# **SECTION 7: Handling and storage**

### 7.1 Precautions for safe handling

Instructions for use: safe Ensure sufficient air exchange and/or exhaust in

workplaces.

Avoid inhalation, ingestion and contact with skin and eyes.

Wear protective clothing.

Persons with a history of skin hypersensitivity or asthma, chronic allergies or recurrent respiratory disease should not be employed in any process in which this mixture is used.

Advice on protection against

fire and: explosions

Keep away from open flames, hot surfaces and sources of

ignition.

Hygiene measures Provide adequate ventilation. Wash hands and face before

breaks and immediately after handling the product.

#### 7.2 Conditions for safe storage, including any incompatibilities

Warehouse and container requirements: containers

Keep containers tightly closed in a dry, cool and wellventilated place. Keep in properly labeled containers.

Directions for the

storage together with other

products

Keep away from oxidizing agents, strong acids or bases and

amines.

Keep the product and empty containers away from heat and

ignition sources.

Keep away from food and drink.

Learn more about

storage stability

: Stable under normal environmental conditions of temperature and

pressure.

#### 7.3 Particular End Uses

: Consult the technical instructions for use of this Particular uses

substance/mixture.

#### **SECTION 8: Exposure controls/personal protection**

### 8.1 Control parameters

Does not contain substances with occupational exposure limit values. Does not contain substances with occupational exposure limit values.

Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:

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Name of the substance	Final use	Street of exposure	Potentials consequences on Health	Value
1.6-to(2.3- epoxypropoxy)hexane	Workers	Contact with skin	Systemic effects a long term	2,8 mg/kg
	Workers	Inhalation	Systemic effects a long term	4.9 mg/m3
Silica, amorphous, fumed, crystfree	Workers	Inhalation	Long-term local effects	4 mg/m3
[3-(2,3- epoxypropoxy)propyl] trimetossisilano	Workers	Contact with skin	Acute systemic effects	21 mg/kg
		Inhalation	Acute systemic effects	147 mg/m3
	Workers		Systemic effects a long term	21 mg/kg
	Workers		Systemic effects a long term	147 mg/m3
2,2-bis-[4-(2,3- epoxypropoxy)phenyl]- propane	Workers	Contact with skin	Acute systemic effects, Systemic effects a long term	8,33 mg/kg
	Workers	Inhalation	Acute systemic effects, Long-term local effects	12.25 mg/m3
	Consumers	Contact with skin	Acute systemic effects, Systemic effects a long term	3,571 mg/kg
	Consumers	Ingestion	Acute systemic effects, Systemic effects a long term	0,75 mg/kg

# Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:

Substance name	Environmental compartment	Value	
1,6-bis(2,3-epoxypropoxy)hexane	Sewage treatment plant	1 mg/l	
	Fresh water	0,0115 mg/l	
	Fresh water sediment	0,283 mg/kg	
	Sea water	0,00115 mg/l	
	Marine sediment	0,0283 mg/kg	
	Soil	0,223 mg/kg	
[3-(2,3-	Sewage treatment plant	10 mg/l	
epoxypropoxy)propyl]trimethoxysilan			
	Fresh water	1 mg/l	
	Sea water	0,1 mg/l	
	Intermittent releases	1 mg/l	
	Fresh water sediment	0,79 mg/kg	
	Soil	0,13 mg/kg	
2,2-bis-[4-(2,3-	Fresh water	0,006 mg/l	
epoxypropoxy)phenyl]-propane			
	Sea water	0,0006 mg/l	
	Intermittent releases	0,018 mg/l	
	Sewage treatment plant	10 mg/l	
	Fresh water sediment	0,996 mg/kg	
	Marine sediment	0,0996 mg/kg	

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## 8.2 Exposure controls

# **Appropriate engineering controls**

Effective exhaust ventilation system effective ventilation in all process areas

### **Individual protection**

Eye protection : Do not wear contact lenses.

Safety goggles with side protection in compliance with

EN166 standard

Make sure that eyewash stations and emergency showers

are close to the workstation.

Hand protection

Material : Protective gloves according to EN 374.

Skin and body protection : Protection suit

Respiratory protection : Use respiratory protection, unless adequate local exhaust

ventilation is provided or exposure assessment demonstrates

exposure meets recommended guidelines.

In case of vapor formation, use a respirator with an

approved filter.

The equipment must comply with EN 14387 Apply the

necessary technical measures not to exceed the

occupational exposure limit values.

This can be obtained through a good general air exchange or,

if practicable, through a local aspirator.

Protection arrangements : Avoid contact with skin. Wear suitable

protective clothing.

#### **SECTION 9: physical and chemical properties**

# 9.1 Information on basic physical and chemical properties

physical state : liquid

Color : light yellow

Odor : light

Olfactory threshold : not determined

Melting point/freezing

point

: Not applicable

Boiling point/range: > 200 °C

Upper explosion limit: Not applicable / Upper limit

of

flammability

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Lower explosion limit /: Not applicable Lower limit

of

flammability

Flash point : 150 °C

Ignition temperature : Not applicable

Temperature of auto access

: Not applicable

Temperature of decomposition

Concentration: 1%

: Method: No data available

Viscosity

рΗ

Viscosity, dynamics : 140.000 - 210.000 mPa.s (25 °C)

: 4-6

Viscosity, kinematics : not determined

Solubility/solubilities.

Water solubility : not determined

Solubility in other solvents : not determined

Partition coefficient: n-: No data available octanol/water

Vapor pressure : not determined

Density : 1,17 g/cm 3 (25 °C)

Apparent density : not determined

Relative vapor density : not determined

Particle characteristics

Particle size : Not applicable

Particle size: Not applicable

#### 9.2 Other Information

Explosives : Not applicable

Oxidizing properties : Not applicable

Self-ignition : Not applicable

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Evaporation rate : not determined

Surface tension : not determined

Sublimation point : Not applicable

# **SECTION 10: stability and reactivity**

### 10.1 Reactivity

Stable under recommended storage conditions.

#### 10.2 Chemical stability

No decomposition if stored and applied as directed.

#### 10.3 Possibility of hazardous reactions

dangerous reactions : Reacts with the following substances:

**Bases** 

Strong oxidizing agents

Avoid amines.

10.4 Conditions to avoid

Conditions to avoid : No decomposition if used according to the specific

instructions.

10.5 Incompatible materials

Materials to avoid : Incompatible with oxidizing agents.

# 10.6 Hazardous decomposition products

This product can release the following:

Carbon monoxide, carbon dioxide or unburned hydrocarbons (smoke).

#### **SECTION 11: toxicological information**

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

#### **Acute toxicity**

#### **Product:**

Acute oral toxicity : Remarks: No data available

Acute toxicity for

inhalation

: Remarks: No data available

Acute dermal toxicity : Remarks: No data available

Acute toxicity (by other routes

of administration) : Remarks: No data available

### **Components:**

#### 2,2-bis-[4-(2,3-epoxypropoxy)phenyl]-propane:

Acute oral toxicity: LD50 (Rat, female): > 2,000 mg/kg

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Method: OECD Test Guideline 420 GLP: yes

Acute dermal toxicity : LD50 (Rat, male and female): > 2,000 mg/kg

Method: OECD Test Guideline 402 GLP: yes

1,6-bis(2,3-epoxypropoxy)hexane:

Acute oral toxicity: LD50 (Rat): 2,900 mg/kg

Method: OECD Test Guideline 401 GLP: yes

Acute dermal toxicity : LD50 (Rabbit): > 2,000 mg/kg Method: OECD

Test Guideline 402 GLP: yes

[3-(2,3-epoxypropoxy)propyl]trimethoxysilane:

Acute toxicity for : LC50 (Rat, male and female): > 5.3 mg/l

inhalation Exposure time: 4 h

Test atmosphere: dust/fog

Method: OECD Test Guideline 403 GLP: yes

Acute dermal toxicity : LD50 (Rabbit, male): 4,250 mg/kg Method:

OECD Test Guideline 402

Skin corrosion/irritation

**Product:** 

Remarks : No data available

**Components:** 

2,2-bis-[4-(2,3-epoxypropoxy)phenyl]-propane:

Species : On rabbit

Exposition time : 4 h

Method : OECD Test Guideline 404 Irritating to

Result : skin BPL : Yes

[3-(2,3-epoxypropoxy)propyl]trimethoxysilane:

Species : On rabbit

Method : OECD Test Guideline 404 No skin

Result : irritation

Serious eye damage/irritation

**Product:** 

Remarks : No data available

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#### **Components:**

#### [3-(2,3-epoxypropoxy)propyl]trimethoxysilane:

Species : On rabbit

Method : OECD Test Guideline 405 Risk of

Result : serious damage to eyes.

# Respiratory or skin sensitisation

**Product:** 

Remarks : No data available

### **Components:**

# 2,2-bis-[4-(2,3-epoxypropoxy)phenyl]-propane:

Test type : Mouse Local Lymph Node assay (LLNA)

Species : Topo

Method : OECD Test Guideline 429

Result : May cause sensitization by skin contact. Yes

BPL :

#### 1,6-bis(2,3-epoxypropoxy)hexane:

Test type : Mouse Local Lymph Node assay (LLNA)

Route of exposure : Dermico Species : Mouse

Method : OECD Test Guideline 429

Result : May cause sensitization by skin contact. Yes

BPI :

#### [3-(2,3-epoxypropoxy)propyl]trimethoxysilane:

Test type : Buehler Test Species : Guinea pig

Method : OECD Test Guideline 406 Does not cause

Result : skin sensitization. Yes

BPL :

### Carcinogenicity

**Product:** 

Remarks : No data available

## Reproductive toxicity

**Product:** 

Effects on fertility : Remarks: No data available

Effects on fetal development : Remarks: No data available

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## Specific target organ toxicity (STOT) - single exposure

**Product:** 

Remarks : No data available

### Specific target organ toxicity (STOT) - repeated exposure

**Product:** 

Remarks : No data available

Repeated dose toxicity

**Product:** 

Remarks : No data available

**Aspiration toxicity** 

**Components:** 

2,2-bis-[4-(2,3-epoxypropoxy)phenyl]-propane:

There is no classification for aspiration toxicity

#### 11.2 Information on other hazards

#### **Endocrine disrupting properties**

**Product:** 

Assessment : The substance/mixture contains no considered components

having endocrine disrupting properties within the meaning

of Article 57(f) of REACH or Commission Delegated

Regulation (EU) 2017/2100 or Commission Regulation (EU)

2018/605 at levels of 0.1% or higher.

**Further information** 

**Product:** 

Remarks : No data available

#### **SECTION 12: ecological information**

# 12.1 Toxicity

**Product:** 

Toxicity to fish : Remarks: No data available

Toxicity to daphnia and

other aquatic invertebrates

: Remarks: No data available

#### **Components:**

### 2,2-bis-[4-(2,3-epoxypropoxy)phenyl]-propane:

Toxicity to daphnia and : to EC50 (Daphnia (water flea)): 1.7 mg/l

other aquatic invertebrates Exposure time: 48 h

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Type of test: Static test

Method: OECD Test Guideline 202 GLP: yes

Toxicity to daphnia and other aquatic invertebrates

(Chronic toxicity)

NOEC: 0.3ma/l Exposure time: 21 d

Species: Daphnia magna (Water flea) Test type:

semi-static test

Method: OECD Test Guideline 211 GLP: yes

1,6-bis(2,3-epoxypropoxy)hexane:

Toxicity to fish LC50 (Oncorhynchus mykiss (rainbow trout)): 30

> mg/l Exposure time: 96 h Type of test: Semi-static test

Method: OECD Test Guideline 203 GLP: yes

Toxicity to daphnia and

other aquatic invertebrates

: EC50 (Daphnia magna (Water flea)): 39 mg/l Exposure

time: 48 h

Type of test: Static test

Method: OECD Test Guideline 202 GLP: yes

[3-(2,3-epoxypropoxy)propyl]trimethoxysilane:

Toxicity to fish : LC50 (Cyprinus carpio (Carp)): 55 mg/l

Exposure time: 96 h

Type of test: Semi-static test

Method: Directive 67/548/EEC, Annex V, C.1.

Toxicity to daphnia and

other aquatic invertebrates

(Chronic toxicity)

NOEC: > 100 mg/l Exposure

time: 21 d

Species: Daphnia magna (Water flea) Test type:

semi-static test

Method: OECD Test Guideline 211 GLP: yes

12.2 Persistence and degradability

**Product:** 

: Remarks: No data available Biodegradability

Physico-chemical elimination : Remarks: No data available

**Components:** 

2,2-bis-[4-(2,3-epoxypropoxy)phenyl]-propane:

Biodegradability Result: Not readily biodegradable. Method:

OECD Test Guideline 301F GLP: yes

1,6-bis(2,3-epoxypropoxy)hexane:

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Biodegradability : Test type: aerobic

Result: Inherently biodegradable. Method: OECD

Test Guideline 301D GLP: yes

#### [3-(2,3-epoxypropoxy)propyl]trimethoxysilane:

Biodegradability : Test type: aerobic

Result: Not readily biodegradable. Method: Directive 67/548/EEC, Annex V, C.4.A. BPL: yes

#### 12.3 Bioaccumulative potential

**Product:** 

Bioaccumulation : Remarks: No data available

# **Components:**

### 2,2-bis-[4-(2,3-epoxypropoxy)phenyl]-propane:

Partition coefficient: n-: log Pow: 3,242 (25 °C)

octanol/water pH: 7,1

Method: OECD Test Guideline 117 GLP: yes

#### 1,6-bis(2,3-epoxypropoxy)hexane:

Partition coefficient: n-: log Pow: 0,822 (20 °C)

octanol/water pH: 6 - 8

Method: OECD Test Guideline 107 GLP: yes

#### 12.4 Mobility in soil

# **Components:**

# 1,6-bis(2,3-epoxypropoxy)hexane:

Diffusion in the various sectors: Log Blanket: 2.98

environmental Method: OECD Test Guideline 121

#### 12.5 Results of PBT and vPvB assessment

#### **Product:**

Assessment : This substance/mixture contains no components

considered either persistent, bioaccumulative and toxic (PBT),

or very persistent and very bioaccumulative (vPvB) at

concentrations of 0.1% or higher.

#### 12.6 Endocrine-disrupting properties

#### **Product:**

Assessment : The substance/mixture contains no considered components

having endocrine disrupting properties according to Article 57(f) of REACH or Delegated Regulation (EU) 2017/2100

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of the Commission or Commission Regulation (EU)

2018/605 at levels of 0.1% or higher.

#### 12.7 Other adverse effects

**Product:** 

Additional ecological

information

: An environmental hazard cannot be excluded in the

event of unprofessional handling or disposal.

### **SECTION 13: Disposal considerations**

#### 13.1 Waste treatment methods

Product : In accordance with local and national regulations.

Dangerous container when empty. Do not dispose of as household waste.

Do not mix waste from different sources during

collection.

Contaminated containers : Empty containers should be taken to an approved site

for recycling or disposal.

# **SECTION 14: transport information**

#### 14.1 UN number or ID number

 ADR/RID/ADN
 : UN 3082

 IMDG
 : UN 3082

 IATA
 : UN 3082

14.2 UN proper shipping name

**ADR/RID/ADN** : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

NOS, ENVIRONMENTALLY HAZARDOUS SUBSTANCE,

LIQUID, NOS

(2,2-bis-[[4-(2,3-epoxypropoxy)phenyl]-propane)

IMDG : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S.

(bis-[4-(2,3-epoxipropoxi)phenyl]propane)

**IATA** : Environmentally hazardous substance, liquid, n.o.s.

(bis-[4-(2,3-epoxipropoxi)phenyl]propane)

#### 14.3 Transport hazard classes

 ADR/RID/ADN
 : 9

 IMDG
 : 9

 IATA
 : 9

#### 14.4 Packing group

ADR/RID/ADN

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Packing group : III
Classification code : M6
Hazard identification : 90

number

Labels : 9 Tunnel restriction code : -

Remarks : ADR: These substances, when carried in single or combined

packagings containing a net quantity per single or inner packing less than or equal to 5 liters for liquids or having a net mass per single or inner packing less than or equal to 5 kg for solids, are not subject to any other provision of ADR provided that the packagings meet the general provisions of

4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8.

**IMDG** 

Packing group : III Labels : 9 EmS Code : F-A, S-F

Remarks : IMDG Code segregation group - none

IMDG: Marine pollutants packed in individual or combination packagings containing an individual or inner packaging net quantity of 5 liters or less for liquids or with an individual or inner packaging net mass of 5 kg or less for solids are not subject to all other provisions of this Code relating to marine pollutants provided that the packaging meets the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8. In the case of marine pollutants that also meet the criteria for inclusion in another hazard class, all provisions of this code relating to

additional hazards continue to apply.

IATA (Cargo)

Packing Instructions

(Cargo Aircraft)

Packing group : III

Labels : Miscellaneous

Remarks : IATA: These substances, when carried in single or

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combination packagings containing a net quantity per single or inner packaging of less than or equal to 5 liters for liquids or having a net mass of 5 kg or less for solids, are not subject to other provisions of this Regulation provided that the packagings meet the general provisions

of 5.0.2.4.1, 5.0.2.6.1.1 and 5.0.2.8.

IATA (Passenger)

Packing Instructions : 964

(Passenger Aircraft)

Packing instruction (LQ) : Y964 Packing group : III

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Labels : Miscellaneous

#### 14.5 Environmental hazards

ADR/RID/ADN

Yes Dangerous for the environment

Yes Marine pollutant

IATA (Cargo)

Yes Dangerous for the environment

### 14.6 Special precautions for user Remarks

The transport of dangerous goods, including loading and unloading, must be carried out by persons who have received the necessary training required by the modal regulations.

The transport classification(s) provided herein are for informational purposes only and based solely on the properties of the unpackaged material as described in this MSDS. Shipping classifications may vary based on mode of transportation, package sizes, and changes in regional or country regulations.

## 14.7 Shipping in bulk in accordance with IMO acts

Not applicable to the product in its supplied form.

# **SECTION 15: Regulatory information**

#### 15.1 Safety, health and environmental laws and regulations specific to the substance or mixture

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII)

: Not applicable

REACH - Candidate List of Substances of Very High

Concern for Authorization (Article 59).

: Not applicable

Regulation (EC) no. 1005/2009 on substances that

deplete the ozone layer

: Not applicable

Regulation (EU) 2019/1021 on persistent organic

pollutants (recast)

: Not applicable

Regulation (EC) no. 649/2012 of the European Parliament: Not applicable

and of the Council on the export and import of

dangerous chemicals

REACH - List of substances subject to

authorization (Annex XIV)

: Not applicable

REGULATION (EU) 2019/1148 on the placing on the

market and use of explosives precursors

: Not applicable

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International Chemical Weapons Convention (CWC), : Not applicable list of chemical precursors and toxic products

Regulation (EC) no. 111/2005 of the Council containing rules for the control of trade in drug precursors between

the Community and third countries

: Not applicable

DANGERS FOR THE ENVIRONMENT

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.

Other legislations : Referring to the product composition, we intentionally do not

E2

add any of the substances listed in the European Directive

2011/65/EU (RoHS 2, RoHS3 and China RoHS).

Consequently, the product is in line with these directives. We do not intentionally add conflict minerals to the

product.

### 15.2 Chemical safety assessment Not

applicable

#### **SECTION 16: other information**

# **Full text of the H-Statements**

H315 : Causes skin irritation.

H317 : May cause an allergic skin reaction. Causes

H318 : serious eye damage.

H319 : Causes serious eye irritation.

H411 : Toxic to aquatic life with long lasting effects. Harmful to

H412 : aquatic life with long lasting effects.

# Full text of other abbreviations

Aquatic Chronic : Long-term (chronic) aquatic hazard Serious eye damage

Eye Dam.

Eye Irrit.Skin Irrit.Skin irritationSkin sensitization

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the international carriage of dangerous goods by road; AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for Testing of Materials; bw - Body weight; CLP - Classification, Labeling and Packaging Regulation; Regulation (EC) No. 1272/2008; CMR - Carcinogenic, mutagenic or toxic to reproduction; DIN - Standard of the German Institute for Standardization; DSL - Domestic List of Substances (Canada); ECHA - European Chemicals Agency; EC-Number - European Community Number; ECx - Concentration associated with x% response; ELx - Load rate associated with x% response; EmS - Emergency Program; ENCS - Existing and New Chemicals (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - Agency

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International Cancer Research; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk; IC50 - Half of the maximum inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemicals China; IMDG - International Maritime Transport of Dangerous Goods; IMO - International Maritime Organization: ISHL - Industrial Safety and Health Law (Japan): ISO - International Organization for Standardization; KECI - Korea Inventory of Existing Chemicals; LC50 - 50% lethal concentration for a test population; LD50 - 50% lethal dose for a test population (lethal dose median); MARPOL - International Convention for the Prevention of Pollution from Ships; nos - not otherwise specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observed Effect Load Rate: NZIOC - New Zealand Chemicals Inventory: OECD - Organization for Economic Co-operation and Development: OPPTS - Bureau of Chemical Safety and Pollution Prevention: PBT - Persistent, bioaccumulative and toxic substance; PICCS - Chemical Substances Inventory of the Philippines; (Q)SAR - (Quantitative) Structure Activity Relationships; REACH - Regulation (EC) No. 1907/2006 of the European Parliament and of the Council concerning the registration, evaluation, the authorization and restriction of chemicals; RID -Regulations concerning the international rail transport of dangerous goods; SADT - Self-accelerating decomposition temperature; SDS - Safety Data Sheet; SVHC - Substance of Very High Concern; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemical Substances Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very persistent and very bioaccumulative TECI - Thailand Existing Chemical Substances Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN -United Nations; vPvB - Very persistent and very bioaccumulative TECI - Thailand Existing Chemical Substances Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very persistent and very bioaccumulative

#### **Further information**

Directions : Provision of information, instructions to operators

on training and training.

#### Classification of the mixture: Classification procedure:

Skin Irrit. 2	H315	Calculation method
Eye Irrit. 2	H319	Calculation method
Skin Sens. 1	H317	Calculation method
Aquatic Chronic 2	H411	Calculation method

The information contained in this Safety Data Sheet is correct according to our best knowledge of the product at the time of publication. This information is provided for the sole purpose of allowing the use, storage, transport and disposal of the product in the most correct and safest way. This information should not be considered a guarantee or specification of product quality.

FN / FN