

## CECCHI GUSTAVO & C.

Via M. Coppino 253 - 55049 Viareggio (Lu) ITALY  
tel. +39 0584 383694 fax +39 0584 395182  
www.cecchi.it info@cecchi.it



C-SYSTEMS STEEL BLUE comp. B – SAFETY DATA SHEET – March 2017 – n° batch 073-A7 rev.1/17

## C-SYSTEMS STEEL BLUE comp. B

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

#### 1.1 Relevant identified uses of the substance or mixture and uses advised against

Trade name: C-SYSTEMS STEEL BLUE component B

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

Use of the Substance/Mixture: Epoxy Hardener

#### 1.3 Details of the supplier of the safety data sheet

Company Cecchi Gustavo & C. srl - Via M. Coppino 253,  
55049 Viareggio (LU) ITALY www.cecchi.it - info@cecchi.it

Information in case of emergency: +39 0584 383694 - info@cecchi.it

From monday to friday office hours 8:30 – 12:30, 14:00 – 18:30

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

##### Classification (REGULATION (EC) No 1272/2008)

Acute toxicity, Category 4	H302: Harmful if swallowed.
Skin corrosion, Category 1B	H314: Causes severe skin burns and eye damage.
Skin sensitisation, Category 1	H317: May cause an allergic skin reaction.
Chronic aquatic toxicity, Category 3	H412: Harmful to aquatic life with long lasting effects.

##### Classification (67/548/EEC, 1999/45/EC)

Harmful	R22: Harmful if swallowed.
Corrosive	R34: Causes burns.
Irritant	R43: May cause sensitisation by skin contact.
Dangerous for the environment	R52/53: Harmful to aquatic organisms, may cause

long-term adverse effects in the aquatic environment.

#### 2.2 Label elements

##### Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms :



Signal word: Danger

Hazard statements:

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

H317 May cause an allergic skin reaction.

Precautionary statements:

##### Prevention:

P261 Avoid breathing dust/ fume/ gas/ mist/  
vapours/ spray.

P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

##### Response:

P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303 + P361 + P353 IF ON SKIN (or hair): Take off  
immediately all contaminated clothing. Rinse skin with water/shower.

P304 + P340 + P310 IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
Immediately call a POISON CENTER/doctor.

P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove  
contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.

Hazardous components which must be listed on the label:

2,2,4(or 2,4,4)-trimethylhexane-1,6-diamine

**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 on ingredients****3.2 Mixtures**

Chemical nature : Aliphatic Amine

**Hazardous components**

Chemical Name	CAS-No. EC-No. Registration number	Classification (REGULATION (EC) No 1272/2008	Concentration (%)
2,2,4(or 2,4,4)- trimethylhexane- 1,6- diamine	25513-64-8 247-063-2 01-2119560598-25	Acute Tox.4; H302 Skin Corr.1A; H314 Eye Dam.1; H318 Skin Sens.1A; H317	>= 50 - <= 100

For explanation of abbreviations see section 16.

**SECTION 4: First aid measures****4.1 Description of first aid measures**

General advice : Show this safety data sheet to the doctor in attendance.

Keep warm and in a quiet place.

Take off all contaminated clothing immediately.

If inhaled : Move to fresh air.

Keep patient warm and at rest.

If unconscious, place in recovery position and seek medical advice.

If symptoms persist, call a physician.

If breathing is irregular or stopped, administer artificial respiration.

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

Do NOT use solvents or thinners.

If on clothes, remove clothes.

Burns must be treated by a physician.

In case of eye contact : Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

If eye irritation persists, consult a specialist.

If easy to do, remove contact lens, if worn.

If swallowed : Do NOT induce vomiting.

If a person vomits when lying on his back, place him in the recovery position.

Call a physician immediately.

Give small amounts of water to drink.

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

Symptoms : Burn

superficial burning sensation

Redness

Severe irritation

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

Treatment : The first aid procedure should be established in consultation with the doctor responsible for industrial medicine.

## **CECCHI GUSTAVO & C.**

Via M. Coppino 253 - 55049 Viareggio (Lu) ITALY  
tel. +39 0584 383694 fax +39 0584 395182  
www.cecchi.it info@cecchi.it



C-SYSTEMS STEEL BLUE comp. B – SAFETY DATA SHEET – March 2017 – n° batch 073-A7 rev.1/17

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

#### **5.1 Extinguishing media**

Suitable extinguishing media:

Carbon dioxide (CO<sub>2</sub>)

Foam

Dry powder

Water mist

Unsuitable extinguishing media: None known.

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

Specific hazards during firefighting:

The pressure in sealed containers can increase under the influence of heat.

Cool closed containers exposed to fire with water spray.

Hazardous decomposition products formed under fire conditions.

#### **5.3 Advice for firefighters**

Special protective equipment for firefighters:

In the event of fire, wear self-contained breathing apparatus.

Use personal protective equipment.

Further information: In the event of fire and/or explosion do not breathe fumes.

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Immediately evacuate personnel to safe areas.

Prevent fire extinguishing water from contaminating surface water or the ground water system.

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

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

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

Evacuate personnel to safe areas.

Use personal protective equipment.

Ensure adequate ventilation.

Inform the responsible authorities in case of gas leakage, or of entry into waterways, soil or drains.

#### **6.2 Environmental precautions**

Environmental precautions : Do not allow uncontrolled discharge of product into the environment.

Try to prevent the material from entering drains or water courses.

Local authorities should be advised if significant spillages cannot be contained.

#### **6.3 Methods and material for containment and cleaning up**

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

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). Pick up and transfer to properly labelled containers.

#### **6.4 Reference to other sections**

For personal protection see section 8.

### **SECTION 7: Handling and storage**

#### **7.1 Precautions for safe handling**

Advice on safe handling: Provide sufficient air exchange and/or exhaust in work rooms.

Do not breathe vapours or spray mist.

Avoid inhalation, ingestion and contact with skin and eyes.

Wear personal protective equipment.

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

Advice on protection against fire and explosion:

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

## CECCHI GUSTAVO & C.

Via M. Coppino 253 - 55049 Viareggio (Lu) ITALY  
tel. +39 0584 383694 fax +39 0584 395182  
www.cecchi.it info@cecchi.it



C-SYSTEMS STEEL BLUE comp. B – SAFETY DATA SHEET – March 2017 – n° batch 073-A7 rev.1/17

handling the product.

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

Requirements for storage areas and containers:

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

To maintain product quality, do not store in heat or direct sunlight.

Further information on storage conditions: Protect from moisture.

Advice on common storage: Keep away from isocyanates.

Do not store near acids.

Keep away from oxidizing agents.

Other data: Stable at normal ambient temperature and pressure.

### 7.3 Specific end use(s)

Specific use(s): Consult the technical guidelines for the use of this substance/mixture.

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

Contains no substances with occupational exposure limit values.

### 8.2 Exposure controls

#### Engineering measures

Effective exhaust ventilation system effective ventilation in all processing areas

#### Personal protective equipment

Eye protection: Safety glasses with side-shields conforming to EN166

Do not wear contact lenses.

Ensure that eyewash stations and safety showers are close to the workstation location.

Hand protection

Material: Chemical resistant gloves made of butyl rubber or nitrile rubber category III according to EN 374.

Skin and body protection: Protective suit

Respiratory protection: Use respirator when performing operations involving potential exposure to vapour of the product.

The filter class for the respirator must be suitable for the maximum expected contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product. If this concentration is exceeded, selfcontained breathing apparatus must be used.

Respirator with a vapour filter (EN 141)

Protective measures: Avoid contact with skin.

Wear suitable protective equipment.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

Appearance :	liquid
Colour :	yellow
Odour :	ammoniacal
Odour Threshold :	not determined
pH :	not determined
Melting point/freezing point :	Not applicable
Boiling point/boiling range :	> 200 °C
Flash point :	100 °C
Evaporation rate :	not determined
Upper explosion limit :	Not applicable
Lower explosion limit :	Not applicable
Vapour pressure :	Not applicable
Relative vapour density :	not determined
Density :	0,88 g/cm <sup>3</sup> (25 °C)
Bulk density :	not determined
Solubility(ies)	
Solubility in other solvents :	not determined

## CECCHI GUSTAVO & C.

Via M. Coppino 253 - 55049 Viareggio (Lu) ITALY  
tel. +39 0584 383694 fax +39 0584 395182  
www.cecchi.it info@cecchi.it



C-SYSTEMS STEEL BLUE comp. B – SAFETY DATA SHEET – March 2017 – n° batch 073-A7 rev.1/17

Partition coefficient: noctanol/water: No data available  
Auto-ignition temperature : Not applicable  
Thermal decomposition : Method: No data available  
Viscosity  
Viscosity, dynamic : 5 - 10 mPa.s (25 °C)  
Viscosity, kinematic : not determined  
Explosive properties : Not applicable  
Oxidizing properties : Not applicable

### 9.2 Other information

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

Hazardous reactions:  
Reacts with the following substances:  
Acids  
Strong oxidizing agents

### 10.4 Conditions to avoid

Conditions to avoid: No decomposition if used as directed.

### 10.5 Incompatible materials

Materials to avoid: Strong acids  
Strong oxidizing agents

### 10.6 Hazardous decomposition products

Hazardous decomposition products:  
This product may release the following:  
Nitrogen oxides (NO<sub>x</sub>)  
Carbon monoxide  
Carbon dioxide (CO<sub>2</sub>)

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Acute toxicity

##### Product:

Acute oral toxicity : Acute toxicity estimate : 506,07 mg/kg  
Method: Calculation method

#### Skin corrosion/irritation

##### Product:

Remarks: Acute dermal irritation/corrosion

#### Serious eye damage/eye irritation

##### Product:

Remarks: Severe eye irritation

#### Respiratory or skin sensitisation

##### Product:

Remarks: No data available

#### Germ cell mutagenicity

#### Carcinogenicity

#### Reproductive toxicity

## CECCHI GUSTAVO & C.

Via M. Coppino 253 - 55049 Viareggio (Lu) ITALY  
tel. +39 0584 383694 fax +39 0584 395182  
www.cecchi.it info@cecchi.it



C-SYSTEMS STEEL BLUE comp. B – SAFETY DATA SHEET – March 2017 – n° batch 073-A7 rev.1/17

### STOT - single exposure

### STOT - repeated exposure

### Repeated dose toxicity

#### Product:

Remarks: No data available

### Aspiration toxicity

### 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

### 12.2 Persistence and degradability

#### Product:

Biodegradability : Remarks: No data available

### 12.3 Bioaccumulative potential

#### Product:

Bioaccumulation : Remarks: No data available

### 12.4 Mobility in soil

No data available

### 12.5 Results of PBT and vPvB assessment

#### Product:

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 adverse effects

#### Product:

Additional ecological  
information

: Remarks: 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.

Container hazardous when empty.

Do not dispose of with domestic refuse.

Do not mix waste streams during collection.

Contaminated packaging : Empty containers should be taken to an approved waste handling site for recycling or disposal.

## SECTION 14: Transport information

### 14.1 UN number

ADR/RID/ADN : UN 2735

IMDG : UN 2735

IATA : UN 2735

### 14.2 UN proper shipping name

ADR/RID/ADN : AMINES, LIQUID, CORROSIVE, N.O.S.

(2,2,4(or 2,4,4)-trimethylhexane-1,6-diamine)

IMDG : AMINES, LIQUID, CORROSIVE, N.O.S.

(2,2,4(or 2,4,4)-trimethylhexane-1,6-diamine)

IATA : Amines, liquid, corrosive, n.o.s.

## CECCHI GUSTAVO & C.

Via M. Coppino 253 - 55049 Viareggio (Lu) ITALY  
tel. +39 0584 383694 fax +39 0584 395182  
www.cecchi.it info@cecchi.it



C-SYSTEMS STEEL BLUE comp. B – SAFETY DATA SHEET – March 2017 – n° batch 073-A7 rev.1/17

(2,2,4(or 2,4,4)-trimethylhexane-1,6-diamine)

### 14.3 Transport hazard class(es)

ADR/RID/ADN : 8

IMDG : 8

IATA : 8

### 14.4 Packing group

ADR/RID/ADN

Packing group : III

Classification Code : C7

Hazard Identification Number : 80

Labels : 8

### IMDG

Packing group : III

Labels : 8

EmS Code : F-A, S-B

Remarks : IMDG Code segregation group 18 - Alkalis

### IATA

Packing instruction (cargo aircraft)

: 856

Packing instruction (passenger aircraft)

: 852

Packing group : III

Labels : 8

### 14.5 Environmental hazards

ADR/RID/ADN

Environmentally hazardous : no

### IMDG

Marine pollutant : no

### 14.6 Special precautions for user

Not applicable

### 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: Regulatory information

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

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

: Not applicable

REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59).

: This product does not contain substances of very high concern

(Regulation (EC) No 1907/2006 (REACH), Article 57).

REACH - List of substances subject to authorisation (Annex XIV)

: Not applicable

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

Not applicable

### 15.2 Chemical safety assessment

Not applicable

## **CECCHI GUSTAVO & C.**

Via M. Coppino 253 - 55049 Viareggio (Lu) ITALY  
tel. +39 0584 383694 fax +39 0584 395182  
www.cecchi.it info@cecchi.it



**C-SYSTEMS STEEL BLUE comp. B – SAFETY DATA SHEET – March 2017 – n° batch 073-A7 rev.1/17**

### **SECTION 16: Other information**

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

H302 : Harmful if swallowed.

H314 : Causes severe skin burns and eye damage.

H317 : May cause an allergic skin reaction.

H318 : Causes serious eye damage.

#### **Full text of other abbreviations**

Acute Tox. : Acute toxicity

Eye Dam. : Serious eye damage

Skin Corr. : Skin corrosion

Skin Sens. : Skin sensitisation

#### **Further information**

Training advice : Provide adequate information, instruction and training for operators.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.