

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 31.05.2017

Revision: 31.05.2017

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

1.1 Product identifier

Trade name: **Castropox® 1233 Comp. B 3**

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

No further relevant information available.

Application of the substance / the mixture Epoxy resin hardening agent

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier:

Resinas Castro S.L.
Pol. Ind. A Granxa C/Cíes 190
36400 O Porriño
Tel.: +34 669 75 48 33; +34 986 342 953
Email: info@castrocomposites.com

Informing department: see section 16

1.4 Emergency telephone number:

Poison Control Center Mainz - 24 h - Emergency Call: +49 (0)6131 19240

GB: Regional Medicines and Poisons Information Centre 844 892 0111

AU: National Poisons Information Network (Australia-wide) 131126

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Skin Corr. 1B H314 Causes severe skin burns and eye damage.

Eye Dam. 1 H318 Causes serious eye damage.

Skin Sens. 1 H317 May cause an allergic skin reaction.

Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the CLP regulation.

Hazard pictograms



GHS05 GHS07

Signal word Danger

Hazard-determining components of labelling:

Polyoxypropylenediamine

3-aminomethyl-3,5,5-trimethylcyclohexylamine

Hazard statements

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

P260 Do not breathe dusts or mists.

P303+P361+P353 IF ON SKIN (or hair): 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.

P310 Immediately call a POISONCENTER/doctor.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

(Contd. on page 2)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 31.05.2017

Revision: 31.05.2017

Trade name: **Castropox® 1233 Comp. B 3**

(Contd. of page 1)

- **2.3 Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

- **3.2 Chemical characterisation: Mixtures**
- **Description:** Epoxy resin hardening agent, formulation on aliphatic polyamine basis

- **Dangerous components:**

CAS: 9046-10-0 Reg.nr.: 01-2119557899-12-xxxx	Polyoxypropylenediamine Skin Corr. 1C, H314; Eye Dam. 1, H318; Aquatic Chronic 3, H412	50-100%
CAS: 2855-13-2 EINECS: 220-666-8 Index number: 612-067-00-9 Reg.nr.: 01-2119514687-32-xxxx	3-aminomethyl-3,5,5-trimethylcyclohexylamine Skin Corr. 1B, H314; Eye Dam. 1, H318; Acute Tox. 4, H302; Acute Tox. 4, H312; Skin Sens. 1A, H317; Aquatic Chronic 3, H412	25-50%

- **Additional information** For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

- **4.1 Description of first aid measures**
- **General information** Instantly remove any clothing soiled by the product.
- **After inhalation**
Take affected persons into the open air and position comfortably
Seek medical treatment in case of complaints.
- **After skin contact**
Instantly wash with water and soap and rinse thoroughly.
If skin irritation continues, consult a doctor.
- **After eye contact** Rinse opened eye for several minutes under running water. Then consult doctor.
- **After swallowing** Drink copious amounts of water and provide fresh air. Instantly call for doctor.
- **4.2 Most important symptoms and effects, both acute and delayed**
No further relevant information available.
- **Information for doctor** No particular measures are known - treat according to symptoms.
- **4.3 Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents**
CO2, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam.
- **For safety reasons unsuitable extinguishing agents** Water with a full water jet.
- **5.2 Special hazards arising from the substance or mixture**
Formation of toxic gases is possible during heating or in case of fire.
- **5.3 Advice for firefighters**
- **Protective equipment:** Put on breathing apparatus.
- **Additional information**
Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
Wear protective clothing.

(Contd. on page 3)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 31.05.2017

Revision: 31.05.2017

Trade name: **Castropox® 1233 Comp. B 3**

(Contd. of page 2)

- **6.2 Environmental precautions:**
Do not allow product to reach sewage system or water bodies.
Do not allow to enter the ground/soil.
- **6.3 Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose of contaminated material as waste according to item 13.
Ensure adequate ventilation.
- **6.4 Reference to other sections** Clean the accident area carefully.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**
The usual precautionary measures for handling chemicals must be observed.
Ensure good ventilation/exhaustion at the workplace.
- **Information about protection against explosions and fires:** No special measures required.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage**
- **Requirements to be met by storerooms and containers:** Store only in the original container.
- **Information about storage in one common storage facility:** Store away from foodstuffs.
- **Further information about storage conditions:** Keep container tightly sealed.
- **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **8.1 Control parameters**
- **Components with limit values that require monitoring at the workplace:**
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

· **DNELs**

2855-13-2	3-aminomethyl-3,5,5-trimethylcyclohexylamine
Inhalative	DNEL - worker 20.1 mg/m ³

· **PNECs**

9046-10-0 Polyoxypropylenediamine	
PNEC (predicted no effect concentration)	0.015 mg/l (Frischwasser (freshwater))
	0.0142 mg/l (Meerwasser (seawater))
2855-13-2 3-aminomethyl-3,5,5-trimethylcyclohexylamine	
PNEC (predicted no effect concentration)	0.06 mg/l (Frischwasser (freshwater))
	0.006 mg/l (Meerwasser (seawater))

- **Additional information:** The lists that were valid during the compilation were used as basis.

- **8.2 Exposure controls**
- **Personal protective equipment**
- **General protective and hygienic measures**
Keep away from foodstuffs, beverages and food.
Take off immediately all contaminated clothing
Wash hands during breaks and at the end of the work.
Avoid contact with the eyes and skin.
- **Breathing equipment:** Use breathing protection in case of insufficient ventilation.

(Contd. on page 4)

GB

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 31.05.2017

Revision: 31.05.2017

Trade name: **Castropox® 1233 Comp. B 3**

(Contd. of page 3)

· **Recommended filter device for short term use:**



Combination filter A-P2

· **Protection of hands:**



Plastic gloves

Only use chemical-protective gloves with CE-labelling of category III.

To minimise the wetness in the glove due to perspiration changing of gloves during a shift is required.

Check the permeability prior to each renewed use of the glove.

Preventive skin protection by use of skin-protecting agents is recommended.

· **Material of gloves**

Nitrile rubber, NBR

Fluorocarbon rubber (Viton)

Recommended thickness of the material: ≥ 0.5 mm

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **As protection from splashes gloves made of the following materials are suitable: PVC gloves**

· **Not suitable are gloves made of the following materials:**

Leather gloves

Strong gloves

· **Eye protection:**



Tightly sealed safety glasses.

· **Body protection:** Protective work clothing.

SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

Form:	Fluid
Colour:	Blue
Odour:	Amine-like

· **Change in condition**

Melting point/freezing point:	Not determined
Initial boiling point and boiling range:	> 200 °C

Flash point:	> 100 °C
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Ignition temperature:	240 °C
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Self-inflammability:	Product is not selfigniting.
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Explosive properties:	Product is not explosive.
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(Contd. on page 5)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 31.05.2017

Revision: 31.05.2017

Trade name: **Castropox® 1233 Comp. B 3**

(Contd. of page 4)

· Critical values for explosion:	
Lower:	0.7 Vol %
Upper:	5.0 Vol %
· Vapour pressure at 20 °C:	0 hPa
· Density at 23 °C	0.93 g/cm ³ (ISO 2811-2)
· Solubility in / Miscibility with Water:	Not miscible or difficult to mix
· Viscosity:	
dynamic at 25 °C:	13 mPas (ISO 3219)
· 9.2 Other information	No further relevant information available.

SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** strong oxidizing agents
- **10.6 Hazardous decomposition products:**
in the event of fire:
Poisonous gases/vapours
Corrosive gases/vapours

SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity** Based on available data, the classification criteria are not met.

- **LD/LC50 values that are relevant for classification:**

9046-10-0 Polyoxypropylenediamine		
Oral	LD50	2885 mg/kg (rat)
Dermal	LD50	2980 mg/kg (rab)
2855-13-2 3-aminomethyl-3,5,5-trimethylcyclohexylamine		
Oral	LD50	1030 mg/kg (rat)
Dermal	LD50	1840 mg/kg (rab)
		>2000 mg/kg (rat)

- **Primary irritant effect:**
- **Skin corrosion/irritation**
Causes severe skin burns and eye damage.
- **Serious eye damage/irritation**
Causes serious eye damage.
- **Respiratory or skin sensitisation**
May cause an allergic skin reaction.
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT-single exposure** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.

(Contd. on page 6)

GB

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 31.05.2017

Revision: 31.05.2017

Trade name: **Castropox® 1233 Comp. B 3**

(Contd. of page 5)

- **Aspiration hazard** Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

• 12.1 Toxicity

• **Aquatic toxicity:**

9046-10-0 Polyoxypropylenediamine

Bakterientoxizität (Bacteria toxicity) (static)	310 mg/l (Belebtschlamm (activated sludge)) (OECD 209)
Daphnientoxizität (Daphnia toxicity)	80 mg/l (Daphnia magna (Wasserfloh)) (EC50(48h))
Algtoxizität (Algae toxicity)	15 mg/l (Pseudokirchnerilla subcapitata) (EC50(72h))
Fischtoxizität (Fish toxicity)	>15 mg/l (Ochorhyncus mykiss (Regenbogenforelle)) (LC50(96h))

2855-13-2 3-aminomethyl-3,5,5-trimethylcyclohexylamine

Bakterien-Toxizität (Bacteria toxicity)	1120 mg/l (Pseudomonas putida) (EC10(18h))
Daphnientoxizität (Daphnia toxicity)	23 mg/l (Daphnia magna (Wasserfloh)) (EC50(48h))
Algtoxizität (Algae toxicity)	>50 mg/l (Scenedesmus subspicatus) (ErC50(72h))
Fischtoxizität (Fish toxicity)	110 mg/l (Leuciscus idus) (LC50(96h))

- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **Ecotoxicological effects:** Not determined
- **Remark:** Harmful to fish
- **Additional ecological information:**
- **General notes:**
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water.
Do not allow undiluted product or large quantities of it to reach ground water, water bodies or sewage system.
Must not reach sewage water or drainage ditch undiluted or unneutralised.
Harmful to aquatic organisms
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

SECTION 13: Disposal considerations

• 13.1 Waste treatment methods

• **Recommendation**

For disposal, local regulations issued by the authorities must be observed. Dispose of liquid components at a suitable incineration plant. After curing, the product can be disposed of with household waste.

• **European waste catalogue**

08 00 00	WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS
08 02 00	wastes from MFSU of other coatings (including ceramic materials)
08 02 99	wastes not otherwise specified

(Contd. on page 7)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 31.05.2017



Revision: 31.05.2017

Trade name: **Castropox® 1233 Comp. B 3**

(Contd. of page 6)

- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

SECTION 14: Transport information

· 14.1 UN-Number · ADR/RID/ADN, IMDG, IATA	UN2735
· 14.2 UN proper shipping name · ADR/RID/ADN · IMDG, IATA	2735 AMINES, LIQUID, CORROSIVE, N.O.S. (Polyoxypropylenediamine) AMINES, LIQUID, CORROSIVE, N.O.S. (Polyoxypropylenediamine)
· 14.3 Transport hazard class(es) · ADR/RID/ADN	
	
· Class · Label	8 (C7) Corrosive substances. 8
· IMDG, IATA	
	
· Class · Label	8 Corrosive substances. 8
· 14.4 Packing group · ADR/RID/ADN, IMDG, IATA	III
· 14.5 Environmental hazards: · Marine pollutant:	Yes No
· 14.6 Special precautions for user · Kemler Number: · EMS Number: · Segregation groups · Stowage Category · Segregation Code	Warning: Corrosive substances. 80 F-A,S-B Alkalis A SG35 Stow "separated from" acids.
· 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code	Not applicable.
· Transport/Additional information:	
· ADR/RID/ADN · Excepted quantities (EQ): · Limited quantities (LQ) · Excepted quantities (EQ) · Transport category	E1 5L Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml 3

(Contd. on page 8)

GB

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 31.05.2017

Revision: 31.05.2017

Trade name: **Castropox® 1233 Comp. B 3**

(Contd. of page 7)

· Tunnel restriction code	E
· IMDG	
· Limited quantities (LQ)	5L
· Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· UN "Model Regulation":	UN 2735 AMINES, LIQUID, CORROSIVE, N.O.S. (POLYOXYPROPYLENEDIAMINE), 8, III

SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
 - **Directive 2012/18/EU**
 - **Named dangerous substances - ANNEX I** None of the ingredients is listed.
 - **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3
 - **National regulations**
- | | |
|------------|-------------|
| VOC | - EU |
| 0.00 | % |
- **Water hazard class:** Water hazard class 1 (Self-assessment): slightly hazardous for water.
 - **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

Changes made since last issue dated 09.12.2014 at the following points: *

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Relevant phrases**
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.
H412 Harmful to aquatic life with long lasting effects.
- **Department issuing data specification sheet:** Castro Composites Technical Department
- **Contact:** Alejandro Castro de la Iglesia
- **Abbreviations and acronyms:**
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
ICAO: International Civil Aviation Organisation
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
DNEL: Derived No-Effect Level (REACH)
PNEC: Predicted No-Effect Concentration (REACH)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
Acute Tox. 4: Acute toxicity – Category 4

(Contd. on page 9)

GB

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 31.05.2017

Revision: 31.05.2017

Trade name: **Castropox® 1233 Comp. B 3**

(Contd. of page 8)

Skin Corr. 1B: Skin corrosion/irritation – Category 1B

Skin Corr. 1C: Skin corrosion/irritation – Category 1C

Eye Dam. 1: Serious eye damage/eye irritation – Category 1

Skin Sens. 1: Skin sensitisation – Category 1

Skin Sens. 1A: Skin sensitisation – Category 1A

Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3

· *** Data compared to the previous version altered.**

GB