



ENDURECEDOR EPOXI SELLADOR 40% SOLIDOS
Code : 12114



Version: 6

Revision: 05/06/2023

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Date of printing: 05/06/2023

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

1.1	PRODUCT IDENTIFIER: ENDURECEDOR EPOXI SELLADOR 40% SOLIDOS Code : 12114 UFI: M2J2-71PR-X00N-3GNY
1.2	RELEVANT IDENTIFIED USES OF THE SUBSTANCE OR MIXTURE AND USES ADVISED AGAINST: <u>Intended uses (main technical functions):</u> ☒ Industrial ☒ Professional ☐ Consumers Hardener. <u>Sectors of use:</u> # Consumer uses (SU21), Consumers. Professional uses (SU22), <u>Types of PCN use:</u> Chemical products: uncategorised. <u>Uses advised against:</u> This product is not recommended for any use or sector of use (industrial, professional or consumer) other than those previously listed as "Intended or identified uses". <u>Restrictions on manufacture, placing on market and use, according to Annex XVII of Regulation (EC) No. 1907/2006:</u> Contains CMR substances, categories 1A or 1B: Restricted to professional users. Forbidden to the general public. The restrictions do not apply to storage, keeping, treatment, filling into containers, or transfer from one container to another of the substances for export. For more details consult the original legislative text. See entry 28 and/or 29 and/or 30 in the Annex of the Regulation (EC) No. 552/2009~276/2010. For more details consult the original legislative text.
1.3	DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET: PINTURAS ISAVAL, S.L. c/Velluters, Parcela 2-14- P.I. Casanova - 46394 Ribarroja del Turia (Valencia) ESPAÑA Phone number: +34 96 1640001 - Fax: +34 96 1640002 - www.isaval.es <u>- E-mail address of the person responsible for the Safety Data Sheet:</u> atencionalcliente@isaval.es
1.4	EMERGENCY TELEPHONE NUMBER: +34 96 1640001 8:00-18:00 h. National Poisons Information Service (NPIS) - In England, Wales or Scotland: dial 111 - In N Ireland: contact your local GP or pharmacist during normal hours.

SECTION 2 : HAZARDS IDENTIFICATION

2.1

CLASSIFICATION OF THE SUBSTANCE OR MIXTURE:

Classification of mixtures is carried out in accordance with the following principles: a) when data (tests) for the classification of mixtures are available, generally is carried out based on these data, b) in the absence of data (tests) for mixtures are generally used interpolation or extrapolation methods of assessing the risk, using the available data for mixtures similarly classified, and c) in the absence of tests and information which would allow to apply interpolation or extrapolation techniques, methods are used to classify risk assessment based on the data of the individual components in the mixture.

Classification in accordance with Regulation (EU) No. 1272/2008~2021/849 (CLP):

DANGER:Skin Corr. 1B:H314|Eye Dam. 1:H318|Skin Sens. 1:H317|Repr. 1B:H360F|STOT RE 2:H373|Aquatic Chronic 2:H411|EUH071

Danger class	Classification of the mixture	Cat.	Routes of exposure	Target organs	Effects
Physicochemical: Not classified					
Human health: 	Skin Corr. 1B:H314 c) Eye Dam. 1:H318 c) Skin Sens. 1:H317 c) Repr. 1B:H360F c) STOT RE 2:H373 c) EUH071 c)	Cat.1B Cat.1 Cat.1 Cat.1B Cat.2 -	Skin Eyes Skin - Inhalation Inhalation	Skin Eyes Skin Reproductive system Systemic Respiratory tract	Burns Serious lesions Allergy Fertility Damage Corrosion
Environment: 	Aquatic Chronic 2:H411 c)	Cat.2	-	-	-

Full text of hazard statements mentioned is indicated in section 16.

Note: When in section 3 a range of percentages is used, the health and environmental hazards describe the effects of the highest concentration of each component, but below the maximum value.

2.2

#LABEL ELEMENTS:

This product is labelled with the signal word DANGER in accordance with Regulation (EU) No. 1272/2008~2021/849 (CLP)

- Hazard statements:

H360F

May damage fertility.

H373

May cause damage to organs through prolonged or repeated exposure if inhaled.

H314

Causes severe skin burns and eye damage.

H317

May cause an allergic skin reaction.

H411

Toxic to aquatic life with long lasting effects.

EUH071

Corrosive to the respiratory tract.



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#- Precautionary statements:

- P102-P405 Keep out of reach of children. Store locked up.
 P201-P202-P405 Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Store locked up.
 P280 Wear protective gloves, clothing and eye protection. In case of inadequate ventilation wear respiratory protection.
 P363 Wash contaminated clothing before reuse.
 P303+P361+P353- IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower]. Wash with plenty of water and soap.. Call a POISON CENTER or doctor if you feel unwell.
 P352-P312
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P273-P391-P501 Avoid release to the environment. Collect spillage. Dispose of contents/container in accordance with local regulations.

- Supplementary statements:

- Restricted to professional users.

- Substances that contribute to classification:

4,4'-isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with 3-aminomethyl-3,5,5-trimethylcyclohexylamine
 Xylene (mixture of isomers)
 Fatty acids, tall-oil, reaction products with triethylenetetramine
 Butan-1-ol

Other sensitizing components:

3,3-aminopropylidimethylamine,N-(2-aminoethyl)piperazine,N-(3-(trimethoxysilyl)propyl)ethylenediamine

2.3

OTHER HAZARDS:

Hazards which do not result in classification but which may contribute to the overall hazards of the mixture:

- Other physicochemical hazards:

No other relevant adverse effects are known.

- Other adverse human health effects:

Prolonged exposure to vapours may produce transient drowsiness. Prolonged contact may cause skin dryness.

- Other negative environmental effects:

Does not contain substances that fulfil the PBT/vPvB criteria.

Endocrine disrupting properties:

This product contains substances with endocrine disrupting properties for the environment and human health identified in a concentration equal to or greater than 0.1% by weight: 4,4'-isopropylidenediphenol.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1

SUBSTANCES:

Not applicable (mixture).

3.2

MIXTURES:

This product is a mixture.

Chemical description:

Solution of resins

HAZARDOUS INGREDIENTS:

Substances taking part in a percentage higher than the exemption limit:

15 < C < 20 % 	4,4'-isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with 3-aminomethyl-3,5,5-trimethylcyclohexylamine CAS: 38294-64-3, EC: 500-101-4, REACH: 01-2119965165-33 CLP: Danger: Skin Corr. 1B:H314 Eye Dam. 1:H318 Skin Sens. 1:H317 Aquatic Chronic 3:H412	Autoclassified REACH
15 < C < 20 % 	Xylene (mixture of isomers) CAS: 1330-20-7, EC: 215-535-7, REACH: 01-2119488216-32 CLP: Danger: Flam. Liq. 3:H226 Acute Tox. (inh.) 4:H332 (ATE=11000 mg/m3) Acute Tox. (skin) 4:H312 (ATE=1700 mg/kg) Skin Irrit. 2:H315 Eye Irrit. 2:H319 STOT SE (irrit.) 3:H335 STOT RE 2:H373 Asp. Tox. 1:H304	REACH
15 < C < 20 % 	Fatty acids, tall-oil, reaction products with triethylenetetramine CAS: 68082-29-1, EC: 500-191-5, REACH: 01-2119972320-44 CLP: Danger: Skin Irrit. 2:H315 Eye Dam. 1:H318 Aquatic Chronic 2:H411 Skin Sens. 1A:H317	Autoclassified REACH
15 < C < 20 % 	Benzyl alcohol CAS: 100-51-6, EC: 202-859-9, REACH: 01-2119492630-38 CLP: Warning: Acute Tox. (inh.) 4:H332 (ATE=11000 mg/m3) Acute Tox. (oral) 4:H302 (ATE=1620 mg/kg) Eye Irrit. 2:H319	REACH
5 < C < 10 % 	Butan-1-ol CAS: 71-36-3, EC: 200-751-6, REACH: 01-2119484630-38 CLP: Danger: Flam. Liq. 3:H226 Acute Tox. (oral) 4:H302 (ATE=790 mg/kg) Skin Irrit. 2:H315 Eye Dam. 1:H318 STOT SE (irrit.) 3:H335 STOT SE (narcosis) 3:H336	REACH / ATP01

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5 < C < 10 % 	Amines, polyethylenepoly-, triethylenetetramine fraction CAS: 90640-67-8, EC: 292-588-2, REACH: 01-2119487919-13 CLP: Danger: Acute Tox. (skin) 4:H312 (ATE=1465 mg/kg) Acute Tox. (oral) 4:H302 (ATE=1716 mg/kg) Skin Corr. 1B:H314 Eye Dam. 1:H318 Skin Sens. 1:H317 Aquatic Chronic 3:H412 EUH071	Autoclassified REACH
2,5 < C < 5 % 	4,4'-isopropylidenediphenol CAS: 80-05-7, EC: 201-245-8, REACH: 01-2119457856-23 CLP: Danger: Eye Dam. 1:H318 Skin Sens. 1:H317 Repr. 1B:H360F STOT SE (irrit.) 3:H335 Aquatic Chronic 2:H411	REACH
2,5 < C < 5 % 	m-phenylenebis(methylamine) CAS: 1477-55-0, EC: 216-032-5, REACH: 01-2119480150-50 CLP: Danger: Acute Tox. (inh.) 4:H332 (ATE=11000 mg/m3) Acute Tox. (oral) 4:H302 (ATE=930 mg/kg) Skin Corr. 1B:H314 Eye Dam. 1:H318 Aquatic Chronic 3:H412 EUH071 Skin Sens. 1B:H317	Autoclassified REACH
1 < C < 2,5 % 	Pentaethylenehexamine CAS: 4067-16-7, EC: 223-775-9, REACH: 01-2119485826-22 CLP: Danger: Acute Tox. (skin) 4:H312 (ATE=1465 mg/kg) Acute Tox. (oral) 4:H302 (ATE=1862 mg/kg) Skin Corr. 1B:H314 Eye Dam. 1:H318 Skin Sens. 1:H317 Aquatic Acute 1:H400 Aquatic Chronic 1:H410	REACH
1 < C < 2,5 % 	Salicylic acid CAS: 69-72-7, EC: 200-712-3, REACH: 01-2119486984-17 CLP: Danger: Acute Tox. (oral) 4:H302 (ATE=891 mg/kg) Eye Dam. 1:H318 Repr. 2:H361d	REACH / ATP13
C < 1 % 	3,3-aminopropylidimethylamine CAS: 109-55-7, EC: 203-680-9, REACH: 01-2119486842-27 CLP: Danger: Flam. Liq. 3:H226 Acute Tox. (skin) 4:H312 (ATE=1002 mg/kg) Acute Tox. (oral) 4:H302 (ATE=410 mg/kg) Skin Corr. 1B:H314 Eye Dam. 1:H318 STOT SE (irrit.) 3:H335 Skin Sens. 1B:H317	REACH
C < 1 % 	N-(2-aminoethyl)piperazine CAS: 140-31-8, EC: 205-411-0, REACH: 01-2119471486-30 CLP: Danger: Acute Tox. (skin) 4:H312 (ATE=1100 mg/kg) Acute Tox. (oral) 4:H302 (ATE=500 mg/kg) Skin Corr. 1B:H314 Skin Sens. 1:H317 Aquatic Chronic 3:H412	REACH / CLP00
C < 1 % 	N-(3-(trimethoxysilyl)propyl)ethylenediamine CAS: 1760-24-3, EC: 217-164-6, REACH: 01-2119970215-39 CLP: Danger: Eye Dam. 1:H318 STOT SE (irrit.) 3:H335 Skin Sens. 1B:H317	Autoclassified REACH

Impurities:

Does not contain other components or impurities which will influence the classification of the product.

Stabilizers:

None.

Reference to other sections:

For more information on hazardous ingredients, see sections 8, 11, 12 and 16.

SUBSTANCES OF VERY HIGH CONCERN (SVHC):

List updated by ECHA on 17/01/2023.

Substances SVHC subject to authorisation, included in Annex XIV of Regulation (EC) no. 1907/2006:

None.

Substances SVHC candidate to be included in Annex XIV of Regulation (EC) no. 1907/2006:

4,4'-isopropylidenediphenol. Repr.Cat.1B (Article 57c), Decision: ED/01/2017, Endocrine disrupting properties having probable serious effects to human health (Article 57f), Decision: ED/30/2017, and Endocrine disrupting properties having probable serious effects to environment (Article 57f), Decision: ED/01/2018.

PERSISTENT, BIOACCUMULABLE AND TOXIC PBT, OR VERY PERSISTENT AND VERY BIOACCUMULABLE VPVB SUBSTANCES:

Does not contain substances that fulfil the PBT/vPvB criteria.

SECTION 4: FIRST AID MEASURES**4.1 DESCRIPTION OF FIRST AID MEASURES:**

Symptoms may occur after exposure, so that in case of direct exposure to the product, when in doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person. Lifeguards should pay attention to self-protection and use the recommended protective equipment if there is a possibility of exposure. Wear protective gloves when administering first aid.

Route of exposure	Symptoms and effects, acute and delayed	Description of first-aid measures
Inhalation: 	Inhalation of solvent vapours may produce headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, unconsciousness. Inhalation produces burning sensation, coughing, breathlessness and sore throat.	Remove the patient out of the contaminated area into the fresh air. If breathing is irregular or stops, administer artificial respiration. If the person is unconscious, place in appropriate recovery position. Keep the patient warm and at rest until medical attention arrives.



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Previous revision: 19/12/2022

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	Skin: 	Skin contact causes redness and pain. Skin contact causes redness, burns and pain. Prolonged contact may cause skin dryness.	Remove immediately contaminated clothing. Wash thoroughly the affected area with plenty of cold or lukewarm water and neutral soap, or use a suitable skin cleanser. Do not use solvents or thinners.
	Eyes: 	Contact with the eyes produces redness, pain and serious burns.	Remove contact lenses. Rinse eyes copiously by irrigation with plenty of clean, fresh water, holding the eyelids apart. If irritation persists, consult a physician.
	Ingestion:	If swallowed, may cause irritation of the throat, abdominal pain, drowsiness, nausea, vomiting and diarrhoea. If swallowed, causes severe burns on the lips, mouth, throat and oesophagus, with gastric disorders and abdominal pain.	If swallowed, seek medical advice immediately and show container or label. Drink large quantities of water. Do not induce vomiting, due to the risk of perforation. Keep the patient at rest.

4.2 MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED:

The main symptoms and effects are indicated in sections 4.1 and 11.1

4.3 INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED:Notes to physician:

Treatment should be directed at the control of symptoms and the clinical condition of the patient..

Antidotes and contraindications:

Specific antidote not known.

SECTION 5: FIREFIGHTING MEASURES5.1 EXTINGUISHING MEDIA:

Extinguishing powder or CO2.

5.2 SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE:

As consequence of combustion or thermal decomposition, hazardous products may be produced: carbon monoxide, Carbon dioxide, nitrogen oxides, ammonia. Exposure to combustion or decomposition products may be a hazard to health.

5.3 ADVICE FOR FIREFIGHTERS:Special protective equipment:

Depending on magnitude of fire, heat-proof protective clothing may be required, appropriate independent breathing apparatus, gloves, protective glasses or face masks and boots. If the fire-proof protective equipment is not available or is not being used, combat fire from a sheltered position or from a safe distance. The standard EN469 provides a basic level of protection for chemical incidents.

Other recommendations:

Cool with water the tanks, cisterns or containers close to sources of heat or fire. Bear in mind the direction of the wind. Do not allow fire-fighting residue to enter drains, sewers or water courses.



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SECTION 6: ACCIDENTAL RELEASE MEASURES

- 6.1 **PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES:**
Eliminate possible sources of ignition and when appropriate, ventilate the area. Do not smoke. Avoid direct contact with this product. Avoid breathing vapours. Keep people without protection in opposition to the wind direction.
- 6.2 **ENVIRONMENTAL PRECAUTIONS:**
Avoid contamination of drains, surface or subterranean water and soil. In the case of large scale spills or when the product contaminates lakes, rivers or sewages, inform the appropriate authorities in accordance with local regulations.
- 6.3 **METHODS AND MATERIAL FOR CONTAINMENT AND CLEANING UP:**
Contain and mop up spills with non-combustible absorbent materials (earth, sand, vermiculite, diatomaceous earth, etc.). Clean preferably with a biodegradable detergent. Keep the remains in a closed container.
- 6.4 **REFERENCE TO OTHER SECTIONS:**
For contact information in case of emergency, see section 1.
For information on safe handling, see section 7.
For exposure controls and personal protection measures, see section 8.
For waste disposal, follow the recommendations in section 13.

SECTION 7: HANDLING AND STORAGE

- 7.1 **PRECAUTIONS FOR SAFE HANDLING:**
Comply with the existing legislation on health and safety at work.
- General recommendations:
Use in areas free from sources of ignition and away from heat or electrical sources. Do not smoke. Handle with care, avoiding any discharge. Avoid any type of leakage or escape. Keep the container tightly closed.
- Recommendations for the prevention of fire and explosion risks:
Vapours are heavier than air, may spread along floors to a considerable distance, can form explosive mixtures with air and are able to reach distant ignition sources and flame up or explode. Due to its flammability, this material should only be used in areas from which all naked lights and other sources of ignition have been excluded and away from other heat or electrical sources. Switch mobile phones off and do not smoke. No tools with a potential for sparks should be used.
Flashpoint 39* °C (Pensky-Martens) CLP 2.6.4.3.
Autoignition temperature: 403* °C
- Recommendations for the prevention of toxicological risks:
Pregnant women should not be employed in any process in which this product is used. Do not eat, drink or smoke while handling. After handling, wash hands with soap and water. For exposure controls and personal protection measures, see section 8.
- Recommendations for the prevention of environmental contamination:
Avoid any spillage in the environment. Pay special attention to the cleaning water. In the case of accidental spillage, follow the instructions indicated in section 6.
- 7.2 **CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES:**
Forbid the entry to unauthorized persons. Keep out of reach of children. This product should be stored isolated from heat and electrical sources. Do not smoke in storage area. If possible, avoid direct contact with sunlight. Avoid extreme humidity conditions. In order to avoid leakages, the containers, after use, should be closed carefully and placed in a vertical position. Due to its corrosive properties, extreme precaution in the selection of materials for pumps, packages and lines should be taken. The floor must be waterproof and corrosion resistant, with a canal system allowing the liquid to be channelled towards a neutralising pit. The electrical equipment must be made of non-corrodible materials. For more information, see section 10.
- Class of store:
According to current legislation.
- Maximum storage period:
12 Months.
- Temperature interval:
min: 5 °C, max: 40 °C (recommended).
- Incompatible materials:
Keep away from oxidizing agents, from strongly alkaline and strongly acid materials.
- Type of packaging:
According to current legislation.
- Limit quantity (Seveso III): Directive 2012/18/EU:
- Named dangerous substances/mixtures: None
- Hazard categories and lower-/upper threshold quantities in tonnes (t):
· Physical hazards: Not applicable.
· Health hazards: Not applicable
· Environmental hazards: Toxic to aquatic life with long lasting effects. (E2) (200t/500t).
· Other hazards: Corrosive to the respiratory tract. (O4) (50t/200t).
- Threshold quantity for the application of lower-tier requirements: 50 tons
- Threshold quantity for the application of upper-tier requirements: 200 tons
Corrosive to the respiratory tract. (O4) (50t/200t).
- Remarks:
The qualifying quantities set out above relate to each establishment. The quantities to be considered for the application of the relevant Articles are the maximum quantities which are present or are likely to be present at any one time. Dangerous substances present at an establishment only in quantities equal to or less than 2 % of the relevant qualifying quantity shall be ignored for the purposes of calculating the total quantity present, if their location within an establishment is such that it cannot act as an initiator of a major accident elsewhere at that establishment. For more details, see note 4 of Annex I of the Seveso Directive.
- 7.3 **SPECIFIC END USE(S):**



ENDURECEDOR EPOXI SELLADOR 40% SOLIDOS

Code : 12114



Version: 6

Revision: 05/06/2023

Previous revision: 19/12/2022

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For the use of this product particular recommendations apart from that already indicated are not available.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 CONTROL PARAMETERS:

If a product contains ingredients with exposure limits, may be necessary a personnel monitoring, work place or biological, to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to EN689, EN14042 and EN482 standard concerning methods for assessing the exposure by inhalation to chemical agents, and exposure to chemical and biological agents. Reference should be also made to national guidance documents for methods for the determination of dangerous substances.

- OCCUPATIONAL EXPOSURE LIMIT VALUES (WEL)

EH40/2005 WELs (United Kingdom) 2018	Year	WEL-TWA		WEL-STEL		Remarks
		ppm	mg/m ³	ppm	mg/m ³	
Xylene (mixture of isomers)	1996	100	434	150	651	BMGV, A4
Butan-1-ol	1998	20	61	-	-	

WEL - Workplace Exposure Limit, TWA - Time Weighted Average (8 hours), STEL - Short Term Exposure Limit (15 min).

BMGV - Biological monitoring guidance value. BMGVs are non-statutory and any biological monitoring undertaken in association with a guidance value needs to be conducted on a voluntary basis (ie with the fully informed consent of all concerned).

Sk - Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity.

A4 - Non classified as carcinogenic in humans.

- Dermal (Sk):

Means that, in exposures to this substance, the contribution by the cutaneous route, including the mucous membranes and eyes, may result significant for the overall body content if no measures are taken to prevent absorption. There are some chemicals for which dermal absorption, both in liquid and vapour phases, can be very high, and this route of entry may be or equal or greater importance even that inhalation pathway. In these situations, the use of a biological control is essential in order to quantify the overall amount of contaminant absorbed.

- BIOLOGICAL LIMIT VALUES:

Biological monitoring can be a very useful complementary technique to air monitoring when air sampling techniques alone may not give a reliable indication of exposure. Biological monitoring is the measurement and assessment of hazardous substances or their metabolites in tissues, secretions, excreta or expired air, or any combination of these, in exposed workers. Measurements reflect absorption of a substance by all routes. Biological monitoring may be particularly useful in circumstances where there is likely to be significant skin absorption and/or gastrointestinal tract uptake following ingestion, where control of exposure depends on respiratory protective equipment, where there is a reasonably well-defined relationship between biological monitoring and effect, or where it gives information on accumulated dose and target organ body burden which is related to toxicity.

This preparation contains the following substances that have established a biological limit value:

- DERIVED NO-EFFECT LEVEL (DNEL):

Derived no-effect level (DNEL) is a level of exposure that is considered safe, derived from toxicity data according to specific guidances included in REACH. DNEL values may differ from an occupational exposure limit (OEL) for the same chemical. OEL values may come recommended by a particular company, a government regulatory agency or an organization of experts. Although considered protective of health, the OEL values are derived by a process different of REACH.

- DERIVED NO-EFFECT LEVEL, WORKERS:- Systemic effects, acute and chronic:	DNEL Inhalation mg/m ³		DNEL Cutaneous mg/kg bw/d		DNEL Oral mg/kg bw/d	
Amines, polyethylenepoly-, triethylenetetramine fraction	- (a)	0,54 (c)	a/r (a)	a/r (c)	- (a)	- (c)
4,4'-isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with 3-aminomethyl-3,5,5-trimethylcyclohexylamine	s/r (a)	0,493 (c)	s/r (a)	0,14 (c)	- (a)	- (c)
Fatty acids, tall-oil, reaction products with triethylenetetramine	s/r (a)	0,952 (c)	s/r (a)	0,272 (c)	- (a)	- (c)
N-(3-(trimethoxysilyl)propyl)ethylenediamine	b/r (a)	35,3 (c)	5 (a)	5 (c)	- (a)	- (c)
N-(2-aminoethyl)piperazine	10,6 (a)	10,6 (c)	s/r (a)	3,33 (c)	- (a)	- (c)
m-phenylenebis(methylamine)	s/r (a)	1,2 (c)	s/r (a)	0,33 (c)	- (a)	- (c)
Salicylic acid	- (a)	16 (c)	- (a)	2 (c)	- (a)	- (c)
Pentaethylenhexamine	8550 (a)	1,59 (c)	- (a)	0,91 (c)	- (a)	- (c)
Xylene (mixture of isomers)	289 (a)	77 (c)	s/r (a)	180 (c)	- (a)	- (c)
Butan-1-ol	- (a)	310 (c)	- (a)	- (c)	- (a)	- (c)
4,4'-isopropylidenediphenol	10 (a)	10 (c)	1,4 (a)	1,4 (c)	- (a)	- (c)
Benzyl alcohol	450 (a)	90 (c)	47 (a)	9,5 (c)	- (a)	- (c)
3,3-aminopropylidimethylamine	9,8 (a)	4,9 (c)	m/r (a)	m/r (c)	- (a)	- (c)

- DERIVED NO-EFFECT LEVEL, WORKERS:- Local effects, acute and chronic:	DNEL Inhalation mg/m ³		DNEL Cutaneous mg/cm ²		DNEL Eyes mg/cm ²	
Amines, polyethylenepoly-, triethylenetetramine fraction	a/r (a)	a/r (c)	a/r (a)	a/r (c)	m/r (a)	- (c)
4,4'-isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with 3-aminomethyl-3,5,5-trimethylcyclohexylamine	a/r (a)	a/r (c)	a/r (a)	a/r (c)	a/r (a)	- (c)



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N-(3-(trimethoxysilyl)propyl)ethylenediamine	s/r (a)	s/r (c)	m/r (a)	m/r (c)	m/r (a)	- (c)
N-(2-aminoethyl)piperazine	80 (a)	0,015 (c)	s/r (a)	s/r (c)	s/r (a)	- (c)
m-phenylenebis(methylamine)	m/r (a)	0,2 (c)	m/r (a)	m/r (c)	m/r (a)	- (c)
Salicylic acid	- (a)	- (c)	- (a)	- (c)	- (a)	- (c)
Pentaethylenehexamine	- (a)	- (c)	- (a)	0,044 (c)	- (a)	- (c)
Xylene (mixture of isomers)	289 (a)	s/r (c)	s/r (a)	s/r (c)	- (a)	- (c)
Butan-1-ol	- (a)	310 (c)	- (a)	- (c)	- (a)	- (c)
4,4'-isopropylidenediphenol	10 (a)	10 (c)	- (a)	- (c)	- (a)	- (c)
Benzyl alcohol	- (a)	- (c)	- (a)	- (c)	- (a)	- (c)
3,3-aminopropyldimethylamine	b/r (a)	b/r (c)	m/r (a)	m/r (c)	m/r (a)	- (c)

- Derived no-effect level, general population:

Not applicable (product for professional or industrial use).

(a) - Acute, short-term exposure, (c) - Chronic, long-term or repeated exposure.

(-) - DNEL not available (without data of registration REACH).

s/r - DNEL not derived (not identified hazard).

b/r - DNEL not derived (low hazard).

m/r - DNEL not derived (medium hazard).

a/r - DNEL not derived (high hazard).

- PREDICTED NO-EFFECT CONCENTRATION (PNEC):

<u>- PREDICTED NO-EFFECT CONCENTRATION, AQUATIC ORGANISMS:- Fresh water, marine water and intermittent release:</u>	<u>PNEC Fresh water</u> mg/l	<u>PNEC Marine</u> mg/l	<u>PNEC Intermittent</u> mg/l
Amines, polyethylenepoly-, triethylenetetramine fraction	0.0268	0.00268	0.2
4,4'-isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with 3-aminomethyl-3,5,5-trimethylcyclohexylamine	0.0111	0.00111	0.111
Fatty acids, tall-oil, reaction products with triethylenetetramine	0.0043	0.00043	0.043
N-(3-(trimethoxysilyl)propyl)ethylenediamine	0.062	0.0062	0.62
N-(2-aminoethyl)piperazine	0.058	0.0058	0.58
m-phenylenebis(methylamine)	0.094	0.0094	0.152
Salicylic acid	0.2	0.02	1
Pentaethylenehexamine	0.0025	0.0025	0.025
Xylene (mixture of isomers)	0.327	0.327	0.327
Butan-1-ol	0.082	0.0082	2.25
4,4'-isopropylidenediphenol	0.018	0.016	0.01
Benzyl alcohol	1	0.1	2.3
3,3-aminopropyldimethylamine	0.034	0.0034	0.34
<u>- WASTEWATER TREATMENT PLANTS (STP) AND SEDIMENTS IN FRESH- AND MARINE WATER:</u>	<u>PNEC STP</u> mg/l	<u>PNEC Sediments</u> mg/kg dw/d	<u>PNEC Sediments</u> mg/kg dw/d
Amines, polyethylenepoly-, triethylenetetramine fraction	0.13	8.572	0.8572
4,4'-isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with 3-aminomethyl-3,5,5-trimethylcyclohexylamine	10	4320	432
Fatty acids, tall-oil, reaction products with triethylenetetramine	3.84	434.02	43.4
N-(3-(trimethoxysilyl)propyl)ethylenediamine	25	0.22	0.022
N-(2-aminoethyl)piperazine	250	215	21.5
m-phenylenebis(methylamine)	10	0.043	0.0043
Salicylic acid	162	1.42	0.142
Pentaethylenehexamine	1.64	0.22	0.14
Xylene (mixture of isomers)	6.58	12.46	12.46
Butan-1-ol	2476	0.178	0.0178
4,4'-isopropylidenediphenol	320	2.2	0.44
Benzyl alcohol	39	5.27	0.527
3,3-aminopropyldimethylamine	69.5	0.221	0.0221



ENDURECEDOR EPOXI SELLADOR 40% SOLIDOS

Code : 12114



Version: 6

Revision: 05/06/2023

Previous revision: 19/12/2022

Date of printing: 05/06/2023

	<u>- PREDICTED NO-EFFECT CONCENTRATION. TERRESTRIAL ORGANISMS:- Air, soil and effects for predators and humans:</u>			
	<u>PNEC Air</u> mg/m3	<u>PNEC Soil</u> mg/kg dw/d	<u>PNEC Oral</u> mg/kg dw/d	
Amines, polyethylenepoly-, triethylenetetramine fraction	s/r	1.25	n/b	
4,4'-isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with 3-aminomethyl-3,5,5-trimethylcyclohexylamine	s/r	86.4	1	
Fatty acids, tall-oil, reaction products with triethylenetetramine	s/r	86.78	n/b	
N-(3-(trimethoxysilyl)propyl)ethylenediamine	s/r	0.0085	n/b	
N-(2-aminoethyl)piperazine	s/r	1	n/b	
m-phenylenebis(methylamine)	-	0.0278	n/b	
Salicylic acid	-	0.166	-	
Pentaethylenehexamine	-	0.18	0.29	
Xylene (mixture of isomers)	-	2.31	-	
Butan-1-ol	-	0.015	-	
4,4'-isopropylidenediphenol	s/r	3.7	13.8	
Benzyl alcohol	-	0.456	n/b	
3,3-aminopropylidimethylamine	-	0.0242	-	
(-) - PNEC not available (without data of registration REACH). n/b - PNEC not derived (not bioaccumulative potential). s/r - PNEC not derived (not identified hazard).				

8.2

EXPOSURE CONTROLS:ENGINEERING MEASURES:

Provide adequate ventilation. Where reasonably practicable, this should be achieved by the use of local exhaust ventilation and good general extraction. If these measures are not sufficient to maintain concentrations of particulates and vapours below the Occupational Exposure Limits, suitable respiratory protection must be worn.

- Protection of respiratory system:

Avoid the inhalation of vapours.

- Protection of eyes and face:

Install water taps, sources or eyewash bottles with clean water close to the working area.

- Protection of hands and skin:

Install water taps or sources with clean water close to the working area. Barrier creams may help to protect the exposed areas of the skin. Barrier creams should not be applied once exposure has occurred.

OCCUPATIONAL EXPOSURE CONTROLS: REGULATION (EU) NO. 2016/425:

As a general measure on prevention and safety in the work place, we recommend the use of a basic personal protection equipment (PPE), with the corresponding marking. For more information on personal protective equipment (storage, use, cleaning, maintenance, type and characteristics of the PPE, protection class, marking, category, CEN norm, etc.), you should consult the informative brochures provided by the manufacturers of PPE.

Mask: 	✓	A-type filter mask (brown) for gases and vapours of organic compounds with a boiling point higher than 65°C (EN14387). Class 1: low capacity up to 1000 ppm, Class 2: medium capacity up to 5000 ppm, Class 3: high capacity up to 10000 ppm. In order to obtain a suitable protection level, the filter class must be selected depending on the type and concentration of the contaminating agents present, in accordance with the specifications supplied by the filter producers. The respiratory equipment with filters does not work satisfactorily when the air contains high concentrations of vapour or oxygen content less than 18% in volume. In presence of high concentrations of vapour, use independent breathing apparatus.
Safety goggles: 	✓	Safety goggles for chemicals, with suitable lateral protection (EN166). Clean daily and disinfect at regular intervals in accordance with the instructions of the manufacturer.
Face shield: 		Face shield against liquid splashes (EN166), advisable when there is a risk of spillage, diffusion or atomization of the liquid.
Gloves: 	✓	Neoprene rubber gloves (EN374). When repeated or prolonged contact with the product is expected, gloves of protection level 5 or higher should be used, with a breakthrough time of >240 min. When short contact with the product is expected, use gloves with a protection level 2 or higher should be used, with a breakthrough time >30 min. The breakthrough time of the selected glove material should be in accordance with the pretended period of use. There are several factors (for example, temperature), they do in practice the period of use of a protective gloves resistant against chemicals is clearly lower than the established standard EN374. Due to the wide variety of circumstances and possibilities, the instructions/specifications provided by the glove supplier should be taken into account. Use the proper technique of removing gloves (without touching glove's outer surface) to avoid contact of the product with the skin. The gloves should be immediately replaced when any sign of degradation is noted.
Boots: 	✓	Neoprene rubber boots (EN347).



ENDURECEDOR EPOXI SELLADOR 40% SOLIDOS

Code : 12114



Version: 6

Revision: 05/06/2023

Previous revision: 19/12/2022

Date of printing: 05/06/2023

Apron: No.

Clothing:

Clothing resistant to corrosive products will have to be worn.

- Thermal hazards:

Not applicable (the product is handled at room temperature).

ENVIRONMENTAL EXPOSURE CONTROLS:

Avoid any spillage in the environment. Avoid any release into the atmosphere.

- Spills on the soil:

Prevent contamination of soil.

- Spills in water:

Do not allow to escape into drains, sewers or water courses.

-Water Management Act:

This product does not contain any substance included in the list of priority substances in the field of water policy under Directive 2000/60/EC~2013/39/EU.

- Emissions to the atmosphere:

Because of volatility, emissions to the atmosphere while handling and use may result. Avoid any release into the atmosphere.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**9.1 INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES:**Appearance

Physical state:	Liquid
Colour:	Colourless
Odour:	Characteristic
Odour threshold:	Not available (mixture).

Change of state

Melting point:	Not available (mixture).
Initial boiling point:	117,7* °C at 760 mmHg

- Flammability:

Flashpoint	39* °C (Pensky-Martens)	CLP 2.6.4.3.
Lower/upper flammability or explosive limits:	Not available	
Autoignition temperature:	403* °C	

Stability

Decomposition temperature:	Not available (technical impossibility to obtain the data).
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pH-value

pH:	Alkaline
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- Viscosity:

Dynamic viscosity:	500* cps at 20°C
Kinematic viscosity:	Not available.
Viscosity (flow time):	50* sec. CF4 at 20°C

- Solubility(ies):

Solubility in water	Inmiscible
Liposolubility:	Not applicable (inorganic product).
Partition coefficient: n-octanol/water:	2,94* (as log Pow)

- Volatility:

Vapour pressure:	3,5688* mmHg at 20°C
Vapour pressure:	2,6657* kPa at 50°C
Evaporation rate:	Not available (lack of data).

Density

Relative density:	0,994* at 20/4°C	Relative water
Relative vapour density:	3,30* at 20°C 1 atm.	Relative air

Particle characteristics

Particle size:	Not applicable.
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- Explosive properties:

Vapours can form explosive mixtures with air and are able to flame up or explode in presence of an ignition source.

- Oxidizing properties:

Not classified as oxidizing product.

*Estimated values based on the substances composing the mixture.

9.2 OTHER INFORMATION:Information regarding physical hazard classes

No additional information available.

Other security features:

VOC (supply):	34,4 % Weight
VOC (supply):	341,7 g/l
Nonvolatile:	57,37 * % Weight

1h. 60°C



ENDURECEDOR EPOXI SELLADOR 40% SOLIDOS

Code : 12114



Version: 6

Revision: 05/06/2023

Previous revision: 19/12/2022

Date of printing: 05/06/2023

The values indicated do not always coincide with product specifications. The data for the product specifications can be found in the corresponding technical data sheet. For additional information concerning physical and chemical properties related to safety and environment, see sections 7 and 12.

SECTION 10: STABILITY AND REACTIVITY

10.1	REACTIVITY: - Corrosivity to metals: Not available. - Pyrophorical properties: It is not pyrophoric.
10.2	CHEMICAL STABILITY: Stable under recommended storage and handling conditions.
10.3	POSSIBILITY OF HAZARDOUS REACTIONS: Possible dangerous reaction with oxidizing agents, acids, alkalis, reducing agents, water.
10.4	CONDITIONS TO AVOID: - Heat: Keep away from sources of heat. - Light: If possible, avoid direct contact with sunlight. - Air: The product is not affected by exposure to air, but should not be left the containers open. - Humidity: Avoid extreme humidity conditions. - Pressure: Not relevant. - Shock: The product is not sensitive to shocks, but as a recommendation of a general nature should be avoided bumps and rough handling to avoid dents and breakage of packaging, especially when the product is handled in large quantities, and during loading and download operations.
10.5	INCOMPATIBLE MATERIALS: Keep away from oxidixing agents, from strongly alkaline and strongly acid materials.
10.6	HAZARDOUS DECOMPOSITION PRODUCTS: As consequence of thermal decomposition, hazardous products may be produced: nitrogen oxides, ammonia.

SECTION 11: TOXICOLOGICAL INFORMATION

	No experimental toxicological data on the preparation is available. The toxicological classification for these mixture has been carried out by using the conventional calculation method of the Regulation (EU) No. 1272/2008~2021/849 (CLP).																																																																																										
11.1	INFORMATION ON HAZARD CLASSES AS DEFINED IN REGULATION (EC) NO 1272/2008 : ACUTE TOXICITY: <table><tr><th>Dose and lethal concentrations for individual ingredients:</th><th>DL50 (OECD401) mg/kg bw Oral</th><th>DL50 (OECD402) mg/kg bw Cutaneous</th><th>CL50 (OECD403) mg/m3·4h Inhalation</th></tr><tr><td>Amines, polyethylenepoly-, triethylenetetramine fraction</td><td>1716 Rat</td><td>1465 Rabbit</td><td></td></tr><tr><td>Fatty acids, tall-oil, reaction products with triethylenetetramine</td><td>> 2000 Rat</td><td>> 2000 Rabbit</td><td></td></tr><tr><td>N-(3-(trimethoxysilyl)propyl)ethylenediamine</td><td>2295 Rat</td><td>> 2000 Rat</td><td></td></tr><tr><td>N-(2-aminoethyl)piperazine</td><td>2097 Rat</td><td>866 Rabbit</td><td></td></tr><tr><td>m-phenylenebis(methylamine)</td><td>930 Rat</td><td>3100 Rabbit</td><td>> 1340 Rat</td></tr><tr><td>Salicylic acid</td><td>891 Rat</td><td>> 2000 Rabbit</td><td></td></tr><tr><td>Pentaethylenehexamine</td><td>1862 Rat</td><td>1465 Rabbit</td><td></td></tr><tr><td>Xylene (mixture of isomers)</td><td>4300 Rat</td><td>1700 Rabbit</td><td>> 22080 Rat</td></tr><tr><td>Butan-1-ol</td><td>790 Rat</td><td>3430 Rabbit</td><td>> 24665 Rat</td></tr><tr><td>4,4'-isopropylidenediphenol</td><td>3250 Rat</td><td>3000 Rabbit</td><td></td></tr><tr><td>Benzyl alcohol</td><td>1620 Rat</td><td>> 2000 Rabbit</td><td>> 8800 Rat</td></tr><tr><td>3,3-aminopropyldimethylamine</td><td>410 Rat</td><td>1002 Rabbit</td><td>> 4310 Rat</td></tr><tr><th>Estimates of acute toxicity (ATE) for individual ingredients:</th><th>ATE mg/kg bw Oral</th><th>ATE mg/kg bw Cutaneous</th><th>ATE mg/m3·4h Inhalation</th></tr><tr><td>Amines, polyethylenepoly-, triethylenetetramine fraction</td><td>1716</td><td>*1465</td><td>-</td></tr><tr><td>N-(2-aminoethyl)piperazine</td><td>*> 500</td><td>*1100</td><td>-</td></tr><tr><td>m-phenylenebis(methylamine)</td><td>930</td><td>-</td><td>11000 Vapours</td></tr><tr><td>Salicylic acid</td><td>891</td><td>-</td><td>-</td></tr><tr><td>Pentaethylenehexamine</td><td>1862</td><td>*1465</td><td>-</td></tr><tr><td>Xylene (mixture of isomers)</td><td>-</td><td>*1700</td><td>11000 Vapours</td></tr><tr><td>Butan-1-ol</td><td>790</td><td>-</td><td>24665 Vapours</td></tr><tr><td>Benzyl alcohol</td><td>1620</td><td>-</td><td>11000 Vapours</td></tr></table>			Dose and lethal concentrations for individual ingredients:	DL50 (OECD401) mg/kg bw Oral	DL50 (OECD402) mg/kg bw Cutaneous	CL50 (OECD403) mg/m3·4h Inhalation	Amines, polyethylenepoly-, triethylenetetramine fraction	1716 Rat	1465 Rabbit		Fatty acids, tall-oil, reaction products with triethylenetetramine	> 2000 Rat	> 2000 Rabbit		N-(3-(trimethoxysilyl)propyl)ethylenediamine	2295 Rat	> 2000 Rat		N-(2-aminoethyl)piperazine	2097 Rat	866 Rabbit		m-phenylenebis(methylamine)	930 Rat	3100 Rabbit	> 1340 Rat	Salicylic acid	891 Rat	> 2000 Rabbit		Pentaethylenehexamine	1862 Rat	1465 Rabbit		Xylene (mixture of isomers)	4300 Rat	1700 Rabbit	> 22080 Rat	Butan-1-ol	790 Rat	3430 Rabbit	> 24665 Rat	4,4'-isopropylidenediphenol	3250 Rat	3000 Rabbit		Benzyl alcohol	1620 Rat	> 2000 Rabbit	> 8800 Rat	3,3-aminopropyldimethylamine	410 Rat	1002 Rabbit	> 4310 Rat	Estimates of acute toxicity (ATE) for individual ingredients:	ATE mg/kg bw Oral	ATE mg/kg bw Cutaneous	ATE mg/m3·4h Inhalation	Amines, polyethylenepoly-, triethylenetetramine fraction	1716	*1465	-	N-(2-aminoethyl)piperazine	*> 500	*1100	-	m-phenylenebis(methylamine)	930	-	11000 Vapours	Salicylic acid	891	-	-	Pentaethylenehexamine	1862	*1465	-	Xylene (mixture of isomers)	-	*1700	11000 Vapours	Butan-1-ol	790	-	24665 Vapours	Benzyl alcohol	1620	-	11000 Vapours
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ENDURECEDOR EPOXI SELLADOR 40% SOLIDOS

Code : 12114



Version: 6

Revision: 05/06/2023

Previous revision: 19/12/2022

Date of printing: 05/06/2023

3,3-aminopropylidimethylamine	410	*1002	-
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(*) - Point estimates of acute toxicity corresponding to the classification category (see GHS/CLP Table 3.1.2). These values are designed to be used in the calculation of the ATE for classification of a mixture based on its components and do not represent test results.

(-) - The components that are assumed to have no acute toxicity at the upper threshold of category 4 for the corresponding exposure route are ignored.

No observed adverse effect level	NOAEL Oral mg/kg bw/d	NOAEL Cutaneous mg/kg bw/d	NOAEC Inhalation mg/m3
Fatty acids, tall-oil, reaction products with triethylenetetramine	1000 Rat		
N-(2-aminoethyl)piperazine			53,5 Rat

Lowest observed adverse effect level	LOAEL Oral mg/kg bw/d	LOAEL Cutaneous mg/kg bw/d	LOAEC Inhalation mg/m3
Amines, polyethylenepoly-, triethylenetetramine fraction	33 Rat		

INFORMATION ON LIKELY ROUTES OF EXPOSURE: ACUTE TOXICITY:

Routes of exposure	Acute toxicity	Cat.	Main effects, acute and/or delayed	Criteria
Inhalation: Not classified	ATE > 20000 mg/m3	-	Not classified as a product with acute toxicity if inhaled (based on available data, the classification criteria are not met).	GHS/CLP 3.1.3.6.
Skin: Not classified	ATE > 5000 mg/kg bw	-	Not classified as a product with acute toxicity in contact with skin (based on available data, the classification criteria are not met).	GHS/CLP 3.1.3.6.
Eyes: Not classified	Not available.	-	Not classified as a product with acute toxicity by eye contact (lack of data).	GHS/CLP 1.2.5.
Ingestion: Not classified	ATE : 2.540 mg/kg bw	-	Not classified as a product with acute toxicity if swallowed (based on available data, the classification criteria are not met).	GHS/CLP 3.1.3.6.

GHS/CLP 3.1.3.6: Classification of mixtures based on ingredients of the mixture (additivity formula).

CORROSION / IRRITATION / SENSITISATION :

Danger class	Target organs	Cat.	Main effects, acute and/or delayed	Criteria
Respiratory corrosion/irritation: 		-	CORROSIVE: Corrosive to the respiratory tract.	GHS/CLP 1.2.6. 3.8.3.4.
Skin corrosion/irritation: 	Skin 	Cat.1B	CORROSIVE: Causes severe skin burns.	GHS/CLP 3.2.3.3.
Serious eye damage/irritation: 	Eyes 	Cat.1	DAMAGE: Causes serious eye damage.	GHS/CLP 3.3.3.3.
Respiratory sensitisation: Not classified	-	-	Not classified as a product sensitising by inhalation (based on available data, the classification criteria are not met).	GHS/CLP 3.4.3.3.
Skin sensitisation: 	Skin 	Cat.1	SENSITISING: May cause an allergic skin reaction.	GHS/CLP 3.4.3.3.

GHS/CLP 3.2.3.3: Classification of the mixture when data are available for all components or only for some components.

GHS/CLP 3.3.3.3: Classification of the mixture when data are available for all components or only for some components.

GHS/CLP 3.4.3.3: Classification of the mixture when data are available for all components or only for some components.

GHS/CLP 3.8.3.4: Classification of the mixture when data are available for all components or only for some components.

- ASPIRATION HAZARD:

Danger class	Target organs	Cat.	Main effects, acute and/or delayed	Criteria
Aspiration hazard: Not classified	-	-	Not classified as a product hazardous by aspiration (based on available data, the classification criteria are not met).	GHS/CLP 3.10.3.3.

GHS/CLP 3.10.3.3: Classification of the mixture when data are available for all components or only for some components.

SPECIFIC TARGET ORGANS TOXICITY (STOT): Single exposure (SE) and/or Repeated exposure (RE):

Effects	SE/RE	Target organs	Cat.	Main effects, acute and/or delayed	Criteria
Systemic: 	RE	Systemic 	Cat.2	HARMFUL: May cause damage to organs through prolonged or repeated exposure if inhaled.	GHS/CLP 3.8.3.4



ENDURECEDOR EPOXI SELLADOR 40% SOLIDOS

Code : 12114



Version: 6

Revision: 05/06/2023

Previous revision: 19/12/2022

Date of printing: 05/06/2023

GHS/CLP 3.8.3.4: Classification of the mixture when data are available for all components or only for some components.

CMR EFFECTS:

- Carcinogenic effects:

It is not considered as a carcinogenic product.

- Genotoxicity:

It is not considered as a mutagenic product.

- Toxicity for reproduction:

This preparation contains the following ingredients which can be toxic for human reproduction: 4,4'-isopropylidenediphenol (Cat.1B) , Salicylic acid (Cat.2)

- Effects via lactation:

Not classified as a hazardous product for children breast-fed.

DELAYED AND IMMEDIATE EFFECTS AS WELL AS CHRONIC EFFECTS FROM SHORT AND LONG-TERM EXPOSURE:

Routes of exposure

May be absorbed by inhalation of vapour, through the skin and by ingestion.

- Short-term exposure:

Exposure to solvent vapour concentrations in excess of the stated occupational exposure limit, may result in adverse health effects, such as mucous membrane and respiratory system irritation and adverse effects on kidneys, liver and central nervous system. Liquid splashes in the eyes may cause irritation and reversible damage. If swallowed, may cause irritation of the throat; other effects may be the same as described in the exposure to vapours. Causes burns to the skin or eyes by direct contact or to the digestive tract if swallowed. The mists of fine particles are skin and respiratory tract irritants. Causes serious eye damage. Causes skin irritation. May cause drowsiness or dizziness.

- Long-term or repeated exposure:

Repeated or prolonged contact may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin. May cause damage to organs through prolonged or repeated exposure if inhaled.

INTERACTIVE EFFECTS:

Not available.

INFORMATION ABOUT TOXICOCINETICS, METABOLISM AND DISTRIBUTION:

- Dermal absorption:

This preparation contains the following substances for which dermal absorption can be very high: Xylene (mixture of isomers), Butan-1-ol.

- Basic toxicokinetics:

Not available.

ADDITIONAL INFORMATION:

Not available.

11.2 INFORMATION ON OTHER HAZARDS:

Endocrine disrupting properties:

This product contains substances with endocrine disrupting properties for the environment and human health identified in a concentration equal to or greater than 0.1% by weight: 4,4'-isopropylidenediphenol.

Other information:

No additional information available.



ENDURECEDOR EPOXI SELLADOR 40% SOLIDOS
Code : 12114



Version: 6

Revision: 05/06/2023

Previous revision: 19/12/2022

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SECTION 12: ECOLOGICAL INFORMATION

No experimental ecotoxicological data on the preparation as such is available. The ecotoxicological classification for these mixture has been carried out by using the conventional calculation method of the Regulation (EU) No. 1272/2008~2021/849 (CLP).

12.1

TOXICITY:

- Acute toxicity in aquatic environment for individual ingredients	CL50 (OECD 203) mg/l - 96hours	CE50 (OECD 202) mg/l - 48hours	CE50 (OECD 201) mg/l - 72hours
Amines, polyethylenepoly-, triethylenetetramine fraction	330 - Fishes	31 - Daphniae	20 - Algae
4,4'-isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with 3-aminomethyl-3,5,5-trimethylcyclohexylamine	71 - Fishes	11 - Daphniae	79 - Algae
Fatty acids, tall-oil, reaction products with triethylenetetramine	7.1 - Fishes	7.1 - Daphniae	4.3 - Algae
N-(3-(trimethoxysilyl)propyl)ethylenediamine	597 - Fishes	81 - Daphniae	8.8 - Algae
N-(2-aminoethyl)piperazine	2190 - Fishes	58 - Daphniae	1000 - Algae
m-phenylenebis(methylamine)	88 - Fishes	15 - Daphniae	20 - Algae
Salicylic acid	1370 - Fishes	870 - Daphniae	100 - Algae
Pentaethylenhexamine	0.18 - Fishes	18 - Daphniae	1.7 - Algae
Xylene (mixture of isomers)	14 - Fishes	16 - Daphniae	10 - Algae
Butan-1-ol	1376 - Fishes	1328 - Daphniae	500 - Algae
4,4'-isopropylidenediphenol	11 - Fishes	10 - Daphniae	1.4 - Algae
Benzyl alcohol	460 - Fishes	230 - Daphniae	770 - Algae
3,3-aminopropylidimethylamine	122 - Fishes	59 - Daphniae	53 - Algae

- No observed effect concentration	NOEC (OECD 210) mg/l - 28 days	NOEC (OECD 211) mg/l - 21 days	NOEC (OECD 201) mg/l - 72 hours
Amines, polyethylenepoly-, triethylenetetramine fraction		1.9 - Daphniae	1.3 - Algae
Fatty acids, tall-oil, reaction products with triethylenetetramine			0.5 - Algae
N-(3-(trimethoxysilyl)propyl)ethylenediamine			3.1 - Algae
m-phenylenebis(methylamine)		4.7 - Daphniae	11 - Algae
Salicylic acid		10 - Daphniae	
Butan-1-ol		4.1 - Daphniae	

- Lowest observed effect concentration

Not available

ASSESSMENT OF AQUATIC TOXICITY:

Aquatic toxicity	Cat.	Main hazards to the aquatic environment	Criteria
- Acute aquatic toxicity: Not classified	-	Not classified as a hazardous product with acute toxicity to aquatic life (based on available data, the classification criteria are not met).	GHS/CLP 4.1.3.5.5.3.
- Chronic aquatic toxicity:	Cat.2	TOXIC: Toxic to aquatic life with long lasting effects.	GHS/CLP 4.1.3.5.5.4.

CLP 4.1.3.5.5.3: Classification of a mixture for acute hazards, based on summation of classified components.

CLP 4.1.3.5.5.4: Classification of a mixture for chronic (long term) hazards, based on summation of classified components.

12.2

PERSISTENCE AND DEGRADABILITY:- Biodegradability:

Not available.

Aerobic biodegradation for individual ingredients	COD mgO2/g	%DBO/DQO 5 days 14 days 28 days	Biodegradabilidad
Amines, polyethylenepoly-, triethylenetetramine fraction		- - -	Not easy
4,4'-isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with 3-aminomethyl-3,5,5-trimethylcyclohexylamine		- - 1	Not easy
Fatty acids, tall-oil, reaction products with triethylenetetramine		- - 15	Inherently
N-(3-(trimethoxysilyl)propyl)ethylenediamine	2390	- - 39	Not easy
N-(2-aminoethyl)piperazine		- - 1	Not easy



ENDURECEDOR EPOXI SELLADOR 40% SOLIDOS

Code : 12114



Version: 6

Revision: 05/06/2023

Previous revision: 19/12/2022

Date of printing: 05/06/2023

m-phenylenebis(methylamine)		8	29	49	Not easy
Salicylic acid	811	69	-	-	Easy
Pentaethylenehexamine		-	-	13	Not easy
Xylene (mixture of isomers)	2620	52	81	88	Easy
Butan-1-ol	2590	68	92	99	Easy
4,4'-isopropylidenediphenol		-	63	89	Easy
Benzyl alcohol	2515	62	86	95	Easy
3,3-aminopropyldimethylamine		-	90	-	Easy

Note: Biodegradability data correspond to an average of data from various bibliographic sources.

[- Hydrolysis:](#)

Not available.

[- Photodegradability:](#)

Not available.

12.3 BIOACCUMULATIVE POTENTIAL:

May bioaccumulate.

Bioaccumulation for individual ingredients	logPow	BCF L/kg	Potential
Amines, polyethylenepoly-, triethylenetetramine fraction	-2.08		No bioaccumulable
4,4'-isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with 3-aminomethyl-3,5,5-trimethylcyclohexylamine	3.6		No bioaccumulable
Fatty acids, tall-oil, reaction products with triethylenetetramine	10.3	77.4 (calculated)	Low
N-(3-(trimethoxysilyl)propyl)ethylenediamine	-1.67	3.2 (calculated)	No bioaccumulable
N-(2-aminoethyl)piperazine	-1.48	3.2 (calculated)	No bioaccumulable
m-phenylenebis(methylamine)	0.18	3.2 (calculated)	Unlikely, low
Salicylic acid	2.25	3.2 (calculated)	No bioaccumulable
Pentaethylenehexamine	-3.67	3.2 (calculated)	No bioaccumulable
Xylene (mixture of isomers)	3.16	56.5 (calculated)	Low
Butan-1-ol	0.88	3.2 (calculated)	No bioaccumulable
4,4'-isopropylidenediphenol	3.32	70 (calculated)	Low
Benzyl alcohol	1.1	1.37 (calculated)	No bioaccumulable
3,3-aminopropyldimethylamine	-0.35	3.2 (calculated)	No bioaccumulable

12.4 MOBILITY IN SOIL:

Not available

Mobility for individual ingredients	log P _{oc}	Constant of Henry Pa·m ³ /mol 20°C	Potential
Amines, polyethylenepoly-, triethylenetetramine fraction	3,5		No bioaccumulable
Fatty acids, tall-oil, reaction products with triethylenetetramine	6		Low
N-(3-(trimethoxysilyl)propyl)ethylenediamine	-0,06		No bioaccumulable
N-(2-aminoethyl)piperazine	-0,07		No bioaccumulable
m-phenylenebis(methylamine)	0,96		Unlikely, low
Salicylic acid	1,57	0,000744 (calculated)	No bioaccumulable
Pentaethylenehexamine	-1,32		No bioaccumulable
Xylene (mixture of isomers)	2,25	660 (calculated)	Low
Butan-1-ol	0,39	0,63 (calculated)	No bioaccumulable
4,4'-isopropylidenediphenol	3,09		Low
Benzyl alcohol	1,1	0,0341 (calculated)	No bioaccumulable
3,3-aminopropyldimethylamine	0,59		No bioaccumulable

12.5 RESULTS OF PBT AND VPVB ASSESMENT:(Annex XIII of Regulation (EC) no. 1907/2006):

Does not contain substances that fulfil the PBT/vPvB criteria.

12.6 ENDOCRINE DISRUPTING PROPERTIES:

This product contains substances with endocrine disrupting properties for the environment and human health identified in a concentration equal to or greater than 0.1% by weight: 4,4'-isopropylidenediphenol.

12.7 OTHER ADVERSE EFFECTS:[- Ozone depletion potential:](#)

Not available.

[- Photochemical ozone creation potential:](#)



ENDURECEDOR EPOXI SELLADOR 40% SOLIDOS

Code : 12114



Version: 6

Revision: 05/06/2023

Previous revision: 19/12/2022

Date of printing: 05/06/2023

Not available.

- [Earth global warming potential:](#)

Not available.

SECTION 13: DISPOSAL CONSIDERATIONS**13.1** [WASTE TREATMENT METHODS: Directive 2008/98/EC~Regulation \(EU\) no. 1357/2014:](#)

Take all necessary measures to prevent the production of waste whenever possible. Analyse possible methods for revaluation or recycling. Do not discharge into drains or the environment, dispose at an authorised waste collection point. Waste should be handled and disposed in accordance with current local and national regulations. For exposure controls and personal protection measures, see section 8.

[Disposal of empty containers: Directive 94/62/EC~2015/720/EU. Decision 2000/532/EC~2014/955/EU:](#)

Emptied containers and packaging should be disposed in accordance with currently local and national regulations. The classification of packaging as hazardous waste will depend on the degree of emptying of the same, being the holder of the residue responsible for their classification, in accordance with Chapter 15 01 of Decision 2000/532/EC, and forwarding to the appropriate final destination. With contaminated containers and packaging, adopt the same measures as for the product in itself.

[Procedures for neutralising or destroying the product:](#)

Authorised landfill in accordance with local regulations.

SECTION 14: TRANSPORT INFORMATION**14.1** [UN NUMBER OR ID NUMBER:](#)

2735

14.2 [UN PROPER SHIPPING NAME:](#)

AMINES, LIQUID, CORROSIVE, N.O.S. (3,3-aminopropyldimethylamine, Pentaethylenehexamine)

14.3 [TRANSPORT HAZARD CLASS\(ES\):](#)

[Transport by road \(ADR 2023\) and](#)

[Transport by rail \(RID 2023\):](#)

- Class: 8
- Packing group: II
- Classification code: C7
- Tunnel restriction code: (E)
- Transport category: 2, max. ADR 1.1.3.6. 333 L
- Limited quantities: 1 L (see total exemptions ADR 3.4)
- Transport document: Consignment paper.
- Instructions in writing: ADR 5.4.3.4



[Transport by sea \(IMDG 40-20\):](#)

- Class: 8
- Packing group: II
- Emergency Sheet (EmS): F-A, S-B
- First Aid Guide (MFAG): 320
- Marine pollutant: Yes.
- Transport document: Shipping Bill of lading.



[Transport by air \(ICAO/IATA 2021\):](#)

- Class: 8
- Packing group: II
- Transport document: Air Bill of lading.



[Transport by inland waterways \(ADN\):](#)

Not available

14.4 [PACKING GROUP:](#)

See section 14.3

14.5 [ENVIRONMENTAL HAZARDS:](#)

Classified as hazardous for the environment.

14.6 [SPECIAL PRECAUTIONS FOR USER:](#)

Ensure that persons transporting the product know what to do in case of accident or spill. Always transport in closed containers that are upright and secure. Ensure adequate ventilation.

14.7 [MARITIME TRANSPORT IN BULK ACCORDING TO IMO INSTRUMENTS:](#)

Not applicable.



ENDURECEDOR EPOXI SELLADOR 40% SOLIDOS

Code : 12114



Version: 6

Revision: 05/06/2023

Previous revision: 19/12/2022

Date of printing: 05/06/2023

SECTION 15: REGULATORY INFORMATION

15.1 SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS/LEGISLATION SPECIFIC FOR THE SUBSTANCE OR MIXTURE:

The regulations applicable to this product generally are listed throughout this Safety Data Sheet.

Restrictions on manufacture, placing on market and use:

See section 1.2

Tactile warning of danger:

Not applicable (product for professional or industrial use).

Child safety protection:

Not applicable (product for professional or industrial use).

OTHER REGULATIONS:

Not available.

Control of the risks inherent in major accidents (Seveso III):

See section 7.2

Other local legislations:

The receiver should verify the possible existence of local regulations applicable to the chemical.

15.2 CHEMICAL SAFETY ASSESSMENT:

A chemical safety assessment has not been carried out for this mixture.

SECTION 16 : OTHER INFORMATION

16.1 TEXT OF THE PHRASES AND NOTES REFERENCED IN SECTIONS 2 AND/OR 3:

Hazard statements according the Regulation (EU) No. 1272/2008~2021/849 (CLP), Annex III:

H226 Flammable liquid and vapour. H302 Harmful if swallowed. H304 May be fatal if swallowed and enters airways. H312 Harmful 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. H319 Causes serious eye irritation. H332 Harmful if inhaled. H335 May cause respiratory irritation. H336 May cause drowsiness or dizziness. 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. EUH071 Corrosive to the respiratory tract. H360F May damage fertility. H361d Suspected of damage the unborn child. H373 May cause damage to organs through prolonged or repeated exposure if inhaled.

Notes related to the identification, classification and labelling of the substances or mixtures:

Note C : Some organic substances may be marketed either in a specific isomeric form or as a mixture of several isomers. In this case the supplier must state on the label whether the substance is a specific isomer or a mixture of isomers.

EVALUATION OF THE INFORMATION ON THE DANGER OF MIXTURES:

See sections 9.1, 11.1 and 12.1.

ADVICES ON ANY TRAINING APPROPRIATE FOR WORKERS:

It is recommended for all staff that will handle this product to carry out a basic training in occupational risk and prevention, in order to provide understanding and interpretation of Safety Data Sheets and labelling of products as well.

MAIN LITERATURE REFERENCES AND SOURCES FOR DATA:

- European Chemicals Agency: ECHA, <http://echa.europa.eu/>
- Access to European Union Law, <http://eur-lex.europa.eu/>
- Industrial Solvents Handbook, Ibert Mellan (Noyes Data Co., 1970).
- Threshold Limit Values, (AGCIH, 2021).
- European agreement on the international carriage of dangerous goods by road, (ADR 2023).
- International Maritime Dangerous Goods Code IMDG including Amendment 40-20 (IMO, 2020).

ABBREVIATIONS AND ACRONYMS:

List of abbreviations and acronyms that can be used (but not necessarily used) in this Safety Data Sheet:

- REACH: Regulation concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals.
- GHS: Globally Harmonized System of Classification and Labelling of Chemicals of the United Nations.
- CLP: European regulation on Classification, Labelling and Packaging of substances and chemical mixtures.
- 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).
- UVCB: Substances of Unknown or Variable composition, complex reaction products or biological materials.
- SVHC: Substances of Very High Concern.
- PBT: Persistent, bioaccumulable and toxic substances.
- vPvB: Very persistent and very bioaccumulable substances.
- VOC: Volatile Organic Compounds.
- DNEL: Derived No-Effect Level (REACH).
- PNEC: Predicted No-Effect Concentration (REACH).
- LC50: Lethal concentration, 50 percent.
- LD50: Lethal dose, 50 percent.
- UN: United Nations Organisation.
- ADR: European agreement concerning the international carriage of dangerous goods by road.
- RID: Regulations concerning the international transport of dangerous goods by rail.
- IMDG: International Maritime code for Dangerous Goods.
- IATA: International Air Transport Association.
- ICAO: International Civil Aviation Organization.

SAFETY DATA SHEET REGULATIONS:

Safety Data Sheet in accordance with Article 31 of Regulation (EC) No. 1907/2006 (REACH) and Annex of Regulation (EU) No. 2020/878.

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Page 17/17

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[Changes since previous Safety Data Sheet:](#)

Legislative, contextual, numerical, methodological and normative changes since the previous version of the present Safety Data Sheet are identified by #.

The information of this Safety Data Sheet, is based on the present state of knowledge and on current UE and national laws, as the users" working conditionsare beyond our knowledge and control. The product is not to be used for other purposes than those specified, without first obtaining written handling instruction. It is always the responsibility of the user to take all necessary steps in order to fulfil the demand laid down in the local rules and legislation.The information in this Safety Data Sheet is meant as a description of the safety requirements of the product and it is not to be considered as a guarantee of the product"s properties.