

Safety Data Sheet ADEPOXY MATERIA TECH comp. B

Safety Data Sheet dated 7/1/2017, version 1

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

1.1. Product identifier

Trade name: ADEPOXY MATERIA TECH comp. B

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

Recommended use:

Hardener for epoxy products.

Uses advised against:

==

1.3. Details of the supplier of the safety data sheet

Supplier:

ADESITAL S.p.A. - Via XX Settembre, 12/14 - 41040 UBERSETTO DI FIORANO (MO)

Competent person responsible for the safety data sheet:

info@adesital.it

1.4. Emergency telephone number

ADESITAL S.p.A.: - Tel: +(39)-0536-92.75.11 (office hours)

Poison Centre - Ospedale di Niguarda - Milan - Tel. +39/02/66101029

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

EC regulation criteria 1272/2008 (CLP)

⚠ Danger, Skin Corr. 1B, Causes severe skin burns and eye damage.

⚠ Warning, Skin Sens. 1, May cause an allergic skin reaction.

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

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

Hazard pictograms:



Danger

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:



Safety Data Sheet

ADEPOXY MATERIA TECH comp. B

P273 Avoid release to the environment.

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

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 POISON CENTER.

Special Provisions:

None

Contents:

Amides, from tall-oil fatty acids and tetraethylenepentamine

3-aminomethyl-3,5,5-trimethylcyclohexylamine

Special provisions according to Annex XVII of REACH and subsequent amendments:

None

2.3. Other hazards

vPvB Substances: None - PBT Substances: None

Other Hazards:

No other hazards

SECTION 3: Composition/information on ingredients

3.1. Substances

N.A.

3.2. Mixtures

Hazardous components within the meaning of the CLP regulation and related classification:

>= 25% - < 50% Amides, from tall-oil fatty acids and tetraethylenepentamine

CAS: 68155-17-9, EC: 268-945-3

⚠ 3.3/2 Eye Irrit. 2 H319

⚠ 3.2/2 Skin Irrit. 2 H315

⚠ 3.4.2/1 Skin Sens. 1 H317

>= 20% - < 25% fatty acids, C18-unsatd., dimers, oligomeric reaction products with 4,4'-isopropylidenediphenol-1-chloro-2,3-epoxypropane co-oligomer, tall-oil fatty acids, tetraethylenepentamine

CAS: 106906-26-7, EC: 500-296-6

⚠ 3.2/2 Skin Irrit. 2 H315

⚠ 3.3/2 Eye Irrit. 2 H319

4.1/C3 Aquatic Chronic 3 H412

>= 20% - < 25% 3-aminomethyl-3,5,5-trimethylcyclohexylamine

REACH No.: 01-2119514687-32-xxxx, Index number: 612-067-00-9, CAS: 2855-13-2, EC: 220-666-8

⚠ 3.1/4/Dermal Acute Tox. 4 H312

⚠ 3.1/4/Oral Acute Tox. 4 H302

⚠ 3.2/1B Skin Corr. 1B H314

⚠ 3.3/1 Eye Dam. 1 H318

⚠ 3.4.2/1 Skin Sens. 1 H317

4.1/C3 Aquatic Chronic 3 H412

>= 5% - < 10% benzyl alcohol

REACH No.: 01-2119492630-38-XXXX, Index number: 603-057-00-5, CAS: 100-51-6, EC: 202-859-9



Safety Data Sheet

ADEPOXY MATERIA TECH comp. B

- ⚠ 3.1/4/Inhal Acute Tox. 4 H332
- ⚠ 3.1/4/Oral Acute Tox. 4 H302
- ⚠ 3.3/2 Eye Irrit. 2 H319

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Immediately take off all contaminated clothing.

CONSULT A PHYSICIAN IMMEDIATELY.

Remove contaminated clothing immediately and dispose off safely.

After contact with skin, wash immediately with soap and plenty of water.

In case of eyes contact:

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

Protect uninjured eye.

In case of Ingestion:

Do NOT induce vomiting.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

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

The product is harmful following acute exposure to it and poses a serious health threat if inhaled, ingested, or brought into contact with the skin.

The product is corrosive and, if brought into contact with the skin, causes burning, with the destruction of the entire thickness of skin tissue.

If brought into contact with the skin, the product may cause sensitisation of the skin.

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

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

Treatment:

(see paragraph 4.1)

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

Water.

CO2 or Dry chemical fire extinguisher.

Extinguishing media which must not be used for safety reasons:

None in particular.

5.2. Special hazards arising from the substance or mixture

Do not inhale explosion and combustion gases.

Burning produces heavy smoke.

The original ingredients or unidentified toxic and/or irritant compounds may be present in the combustion fumes.

5.3. Advice for firefighters

Use suitable breathing apparatus .

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Move undamaged containers from immediate hazard area if it can be done safely.

SECTION 6: Accidental release measures



Safety Data Sheet

ADEPOXY MATERIA TECH comp. B

- 6.1. Personal precautions, protective equipment and emergency procedures
Wear personal protection equipment.
Remove all sources of ignition.
Remove persons to safety.
See protective measures under point 7 and 8.
- 6.2. Environmental precautions
Limit leakages with earth or sand.
Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.
Retain contaminated washing water and dispose it.
In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.
Suitable material for taking up: absorbing material, organic, sand
- 6.3. Methods and material for containment and cleaning up
Rapidly recover the product, wearing protective clothing.
After the product has been recovered, rinse the area and materials involved with water.
Suitable material for taking up: absorbing material, organic, sand
Wash with plenty of water.
Retain contaminated washing water and dispose it.
- 6.4. Reference to other sections
See also section 8 and 13

SECTION 7: Handling and storage

- 7.1. Precautions for safe handling
Avoid contact with skin and eyes, inhalation of vapours and mists.
Don't use empty container before they have been cleaned.
Before making transfer operations, assure that there aren't any incompatible material residuals in the containers. (see point 10.5)
Contaminated clothing should be changed before entering eating areas.
Do not eat or drink while working.
See also section 8 for recommended protective equipment.
- 7.2. Conditions for safe storage, including any incompatibilities
Keep away from food, drink and feed.
Incompatible materials:
None in particular.
Instructions as regards storage premises:
Adequately ventilated premises.
- 7.3. Specific end use(s)
None in particular

SECTION 8: Exposure controls/personal protection

- 8.1. Control parameters
No occupational exposure limit available
DNEL Exposure Limit Values
benzyl alcohol - CAS: 100-51-6
Consumer: 20 mg/kg - Exposure: Human Oral - Frequency: Short Term, systemic effects
Consumer: 4 mg/kg - Exposure: Human Oral - Frequency: Long Term, systemic effects
Worker Industry: 110 mg/m³ - Consumer: 27 mg/m³ - Exposure: Human Inhalation - Frequency: Short Term, systemic effects
Worker Industry: 22 mg/m³ - Consumer: 5.4 mg/m³ - Exposure: Human Inhalation - Frequency: Long Term, systemic effects
Worker Industry: 40 mg/kg - Consumer: 20 mg/kg - Exposure: Human Dermal - Frequency: Short Term, systemic effects
Worker Industry: 8 mg/kg - Consumer: 4 mg/kg - Exposure: Human Dermal - Frequency:



Safety Data Sheet

ADEPOXY MATERIA TECH comp. B

Long Term, systemic effects

PNEC Exposure Limit Values

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

Target: Fresh Water - Value: 0.06 mg/l

Target: Marine water - Value: 0.006 mg/l

Target: MAP2 - Value: 0.23 mg/l

Target: Freshwater sediments - Value: 5.784 mg/kg

Target: Marine water sediments - Value: 0.578 mg/kg

Target: Soil (agricultural) - Value: 1.121 mg/kg

Target: Microorganisms in sewage treatments - Value: 3.18 mg/l

benzyl alcohol - CAS: 100-51-6

Target: Fresh Water - Value: 1 mg/l

Target: Marine water - Value: 0.1 mg/l

Target: Freshwater sediments - Value: 5.27 mg/kg

Target: Marine water sediments - Value: 0.527 mg/kg

Target: Microorganisms in sewage treatments - Value: 39 mg/l

Target: Soil (agricultural) - Value: 0.45 mg/kg

Target: MAP2 - Value: 2.3 mg/l

8.2. Exposure controls

Eye protection:

Safety goggles.

Use close fitting safety goggles, don't use eye lens.

Protection for skin:

Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton.

Use protective gloves that provides comprehensive protection, e.g. P.V.C., neoprene or rubber.

Respiratory protection:

Not needed for normal use.

In case of insufficient ventilation use mask with A filters (EN 14387).).

Personal Protective Equipment should comply with relevant CE standards (as EN 374 for gloves and EN 166 for goggles), correctly maintained and stored. Consult the supplier to check the suitability of equipment against specific chemicals and for user information.

Thermal Hazards:

None

Environmental exposure controls:

None

Appropriate engineering controls:

None

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance: jelly solution

Colour: light yellow

Odour: ammonia

Odour threshold: N.A.

pH: 11

Melting point / freezing point: N.A.

Initial boiling point and boiling range: N.A.

Solid/gas flammability: N.A.

Upper/lower flammability or explosive limits: N.A.



Safety Data Sheet

ADEPOXY MATERIA TECH comp. B

Vapour density:	N.A.
Flash point:	>100 °C
Evaporation rate:	N.A.
Vapour pressure:	<0.01 kPa (23°C)
Relative density:	1.06 g/cm ³ (23°C)
Vapour density (air=1):	N.A.
Solubility in water:	partly soluble
Solubility in oil:	soluble
Viscosity:	30000 mPa.s (23°C)
Auto-ignition temperature:	N.A.
Explosion limits(by volume):	N.A.
Decomposition temperature:	N.A.
Partition coefficient (n-octanol/water):	N.A.
Explosive properties:	N.A.
Oxidizing properties:	N.A.

9.2. Other information

Miscibility:	N.A.
Fat Solubility:	N.A.
Conductivity:	N.A.
Substance Groups relevant properties	N.A.

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions

10.2. Chemical stability

Stable under normal conditions

10.3. Possibility of hazardous reactions

It may generate toxic gases on contact with oxidising mineral acids, halogenated organic substances, organic peroxides and hydroperoxides, and powerful oxidising agents.

10.4. Conditions to avoid

Stable under normal conditions.

10.5. Incompatible materials

None in particular.

10.6. Hazardous decomposition products

None.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Route(s) of entry:

Ingestion: Yes

Inhalation: Yes

Contact: Yes

There is no toxicological data available on the mixture. Consider the individual concentration of each component to assess toxicological effects resulting from exposure to the mixture.

Toxicological information on main components of the mixture:

Toxicological information of the product:

N.A.

Toxicological information of the main substances found in the mixture:

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

a) acute toxicity:

Test: LC50 - Route: Inhalation Dust - Species: Rat > 5.01 mg/l - Duration: 4h

Test: LD50 - Route: Oral - Species: Rat = 1030 mg/kg

Test: LD50 - Route: Skin - Species: Rat > 2000 mg/kg

benzyl alcohol - CAS: 100-51-6



Safety Data Sheet

ADEPOXY MATERIA TECH comp. B

a) acute toxicity:

Test: LD50 - Route: Skin - Species: Rabbit = 2000 mg/kg

Test: LD50 - Route: Oral - Species: Rat = 1620 mg/kg

Test: LC50 - Route: Inhalation - Species: Rat > 4178 mg/l - Duration: 4h

g) reproductive toxicity:

Test: map1 - Species: Rat = 1072 mg/m³

Corrosive/Irritating Properties:

Skin:

Corrosive. The product can cause burns by contact.

Eye:

The product can cause damage to eyes by contact

Carcinogenic Effects:

No effects are known.

Mutagenic Effects:

No effects are known.

Teratogenic Effects:

No effects are known.

Additional Information:

For this reason, the contact with the skin should be avoided. Once sensitization has occurred, exposures to small amounts of material may cause erythema and edema locally.

If not differently specified, the information required in Regulation (EU)2015/830 listed below must be considered as N.A.:

- a) acute toxicity
- b) skin corrosion/irritation
- c) serious eye damage/irritation
- d) respiratory or skin sensitisation
- e) germ cell mutagenicity
- f) carcinogenicity
- g) reproductive toxicity
- h) STOT-single exposure
- i) STOT-repeated exposure
- j) aspiration hazard

SECTION 12: Ecological information

12.1. Toxicity

Adopt good industrial practices, so that the product is not released into the environment.

Not available data on the mixture

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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

a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish = 110 mg/l - Duration h: 96

Endpoint: EC50 - Species: Daphnia = 23 mg/l - Duration h: 48

Endpoint: EC50 - Species: Daphnia = 388 mg/l - Duration h: 48

Endpoint: EC50 - Species: Algae > 50 mg/l - Duration h: 72

b) Aquatic chronic toxicity:

Endpoint: NOEC - Species: Daphnia = 3 mg/l - Notes: 21 d

benzyl alcohol - CAS: 100-51-6

a) Aquatic acute toxicity:

Endpoint: EC50 - Species: Daphnia = 230 mg/l - Duration h: 48

Endpoint: LC50 - Species: Fish = 770 mg/l - Duration h: 1

Endpoint: EC50 - Species: Algae = 770 mg/l - Duration h: 72

Endpoint: LC50 - Species: Fish = 460 mg/l - Duration h: 96

Endpoint: EC50 - Species: Daphnia = 66 mg/l



Safety Data Sheet

ADEPOXY MATERIA TECH comp. B

b) Aquatic chronic toxicity:

Endpoint: NOEC - Species: Daphnia = 51 mg/l - Notes: 21 d

12.2. Persistence and degradability

benzyl alcohol - CAS: 100-51-6

Biodegradability: Readily biodegradable - Test: N.A. - Duration: N.A. - %: N.A. - Notes: N.A.

12.3. Bioaccumulative potential

N.A.

12.4. Mobility in soil

N.A.

12.5. Results of PBT and vPvB assessment

vPvB Substances: None - PBT Substances: None

12.6. Other adverse effects

None

Not available data on the mixture

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Recover, if possible. Send to authorised disposal plants or for incineration under controlled conditions. In so doing, comply with the local and national regulations currently in force.

Dispose of this material and its container to hazardous or special waste collection point.

Avoid release to the environment. Refer to special instructions/Safety data sheets.

91/156/EEC, 91/689/EEC, 94/62/EC and subsequent amendments.

Disposal of hardened product (EC waste code) : 08 04 10

Disposal of not hardened product (EC waste code) : 08 04 09

The suggested European waste code is just based on the composition of the product.

According to the specific process or application field a different waste code may be necessary.

SECTION 14: Transport information

14.1. UN number

UN Number: 2735

14.2. UN proper shipping name

ADR-Shipping Name: UN 2735 POLYAMINES,LIQUID,CORROSIVE N.O.S.

14.3. Transport hazard class(es)

Rail/Road(RID/ADR): 8,III

ADR-Upper number: NA

Air (ICAO/IATA): 8,III

Sea (IMO/IMDG): 8,III

LIMITED QUANTITY (3.4.6. ADR e 3.4.2. IMDG)

Dangerous goods in limited quantities

14.4. Packing group

14.5. Environmental hazards

Marine pollutant: No

14.6. Special precautions for user

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

No

SECTION 15: Regulatory information

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

Dir. 98/24/EC (Risks related to chemical agents at work)

Dir. 2000/39/EC (Occupational exposure limit values)

Regulation (EC) n. 1907/2006 (REACH)

Regulation (EC) n. 1272/2008 (CLP)



Safety Data Sheet

ADEPOXY MATERIA TECH comp. B

Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013

Regulation (EU) 2015/830

Regulation (EU) n. 286/2011 (ATP 2 CLP)

Regulation (EU) n. 618/2012 (ATP 3 CLP)

Regulation (EU) n. 487/2013 (ATP 4 CLP)

Regulation (EU) n. 944/2013 (ATP 5 CLP)

Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:

Restrictions related to the product:

Restriction 3

Restrictions related to the substances contained:

No restriction.

Legislative Decree no. 81 of the 9th of April 2008 Title XI "Dangerous substances - Chapter I - Protection against chemical agents"

Directive 2000/39/CE and s.m.i. (Professional threshold limit)

Legislative Decree no. 152 of the 3rd of April 2006 and subsequent modifications and additions. (Environmental regulations)

Directive 105/2003/CE (Seveso III): N.A.

ADR Agreement – IMDG Code – IATA Regulation

VOC (2004/42/EC) : N.A. g/l

Provisions related to directive EU 2012/18 (Seveso III):

N.A.

15.2. Chemical safety assessment

No

SECTION 16: Other information

Text of phrases referred to under heading 3:

H319 Causes serious eye irritation.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H412 Harmful to aquatic life with long lasting effects.

H312 Harmful in contact with skin.

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

H318 Causes serious eye damage.

H332 Harmful if inhaled.

This safety data sheet has been completely updated in compliance to Regulation 2015/830.

This document was prepared by a competent person who has received appropriate training.

Main bibliographic sources:

NIOSH - Registry of toxic effects of chemical substances

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This MSDS cancels and replaces any preceding release.

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.

CAS: Chemical Abstracts Service (division of the American Chemical



Safety Data Sheet

ADEPOXY MATERIA TECH comp. B

	Society).
CLP:	Classification, Labeling, Packaging.
DNEL:	Derived No Effect Level.
EINECS:	European Inventory of Existing Commercial Chemical Substances.
GefStoffVO:	Ordinance on Hazardous Substances, Germany.
GHS:	Globally Harmonized System of Classification and Labeling of Chemicals.
IATA:	International Air Transport Association.
IATA-DGR:	Dangerous Goods Regulation by the "International Air Transport Association" (IATA).
ICAO:	International Civil Aviation Organization.
ICAO-TI:	Technical Instructions by the "International Civil Aviation Organization" (ICAO).
IMDG:	International Maritime Code for Dangerous Goods.
INCI:	International Nomenclature of Cosmetic Ingredients.
KSt:	Explosion coefficient.
LC50:	Lethal concentration, for 50 percent of test population.
LD50:	Lethal dose, for 50 percent of test population.
LTE:	Long-term exposure.
PNEC:	Predicted No Effect Concentration.
RID:	Regulation Concerning the International Transport of Dangerous Goods by Rail.
STE:	Short-term exposure.
STEL:	Short Term Exposure limit.
STOT:	Specific Target Organ Toxicity.
TLV:	Threshold Limiting Value.
TWATLV:	Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard).
OEL:	Substance with a Union workplace exposure limit.
VLE:	Threshold Limiting Value.
WGK:	German Water Hazard Class.
TSCA:	United States Toxic Substances Control Act Inventory
DSL:	DSL - Canadian Domestic Substances List
N.A.:	Not available