

Safety Data Sheet

Nordflex EP-B 0101



Safety Data Sheet dated 9/6/2015, version 1

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

- 1.1. Product identifier
Mixture identification:
Trade name: EP-B 0101 Trade
code: EP-B 0101
- 1.2. Relevant identified uses of the substance or mixture and uses advised against
2K Epoxy Enamel for industrial use.
Only for professional use.
Not for autobody shop use.
- 1.3. Details of the supplier of the safety data sheet
Company:
Ind. Chimica Reggiana I.C.R. Spa
Via Gasparini, 7 42124 REGGIO EMILIA Italia
Tel. +39 0522/517803 Fax +39 0522/514384
- Competent person responsible for the safety data sheet:
sdsre@icrsprint.it
- 1.4. Emergency telephone number
Tel. +39 0522-517803

SECTION 2: Hazards identification

- 2.1. Classification of the substance or mixture
Directive criteria, 67/548/CE, 99/45/EC and following amendments thereof:
Properties / Symbols:
☒ Xn Harmful
☒ Xi Irritant
- R Phrases:
R10 Flammable.
R20/21 Harmful by inhalation and in contact with skin.
R36/37/38 Irritating to eyes, respiratory system and skin.
R43 May cause sensitization by skin contact.
R48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation.
R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

EC regulation criteria 1272/2008 (CLP):

- ☒ WARNING, Flam. Liq. 3, Flammable liquid and vapour.
- ☒ WARNING, Acute Tox. 4, Harmful if inhaled.
- ☒ WARNING, Acute Tox. 4, Harmful in contact with skin.
- ☒ WARNING, Skin Irrit. 2, Causes skin irritation.
- ☒ WARNING, Eye Irrit. 2, Causes serious eye irritation.
- ☒ WARNING, Skin Sens. 1, May cause an allergic skin reaction.
- ☒ WARNING, STOT SE 3, May cause respiratory irritation.
- ☒ WARNING, STOT RE 2, May cause damage to organs through prolonged or repeated exposure if inhaled.
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

Symbols:

☒ Xn Harmful

R Phrases:

- R10 Flammable.
R20/21 Harmful by inhalation and in contact with skin.
R36/37/38 Irritating to eyes, respiratory system and skin.
R43 May cause sensitization by skin contact.
R48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation.
R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

S Phrases:

- S23 Do not breathe spray
S25 Avoid contact with eyes.
S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S3/7 Keep container tightly closed in a cool place.
S36/37 Wear suitable protective clothing and gloves.
S51 Use only in well-ventilated areas.

Contents:

Fatty acids C18 with oleylamine
Epoxy resin (700<PM<=1100)
Xylene

Special Provisions:

Contains epoxy constituents. See information supplied by the manufacturer.

Symbols:

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WARNING

Hazard statements:

H226 Flammable liquid and vapour.
H312+H332 Harmful in contact with skin or if inhaled.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H317 May cause an allergic skin reaction.
H335 May cause respiratory irritation.
H373 May cause damage to organs through prolonged or repeated exposure if inhaled.
H412 Harmful to aquatic life with long lasting effects.

Precautionary statements:

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P251 Do not pierce or burn, even after use.
P260 Do not breathe vapours or spray.
P273 Avoid release to the environment.
P280 Wear protective gloves/clothing and eye/face protection.
P312 Call a doctor if you feel unwell.
P314 Get medical advice/attention if you feel unwell.
P370+P378 In case of fire: Use ... to extinguish.

Special Provisions:

EUH205 Contains epoxy constituents. May produce an allergic reaction.

Contents:

Epoxy resin (700<PM<=1100)
Xylene
Solvent naphtha (petroleum), light arom.
2-methylpropan-1-ol; iso-butanol
Fatty acids C18 with oleylamine: May produce an allergic reaction.

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

Restricted to professional users.

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 EEC directive 67/548 and CLP regulation and related classification:

>= 25% - < 30% Epoxy resin (700<PM<=1100)

REACH No.: Polimero, Index number: 603-074-00-8, CAS: 25068-38-6, EC: 500-033-5

Xi; R36/38-43

⚠ 3.3/2 Eye Irrit. 2 H319

⚠ 3.2/2 Skin Irrit. 2 H315

⚠ 3.4.2/1-1A-1B Skin Sens. 1,1A,1B H317

>= 12.5% - < 15% Xylene

REACH No.: 01-2119488216-32, Index number: 601-022-01-6, CAS: 1330-20-7, EC: 215-535-7

Xn, Xi; R36/37/38-48/20-65-10-20/21

⚠ 2.6/3 Flam. Liq. 3 H226

⚠ 3.1/4/Inhal Acute Tox. 4 H332

⚠ 3.1/4/Dermal Acute Tox. 4 H312

⚠ 3.3/2 Eye Irrit. 2 H319

⚠ 3.8/3 STOT SE 3 H335

⚠ 3.2/2 Skin Irrit. 2 H315

⚠ 3.9/2 STOT RE 2 H373

⚠ 3.10/1 Asp. Tox. 1 H304

>= 5% - < 7% Solvent naphtha (petroleum), light arom.

REACH No.: 01-2119455851-35, Index number: 649-356-00-4, CAS: 64742-95-6, EC: 265-199-0

Xn, Xi, N; R66-67-10-37-51/53-65

⚠ 2.6/3 Flam. Liq. 3 H226

⚠ 3.8/3 STOT SE 3 H335

⚠ 3.8/3 STOT SE 3 H336

⚠ 4.1/C2 Aquatic Chronic 2 H411

⚠ 3.10/1 Asp. Tox. 1 H304

EUH066

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DECLP*
DECL*
DECLP (CLP)*

- >= 1% - < 3% 2-butoxyethanol; ethylene glycol monobutyl ether
REACH No.: 01-2119475108-36, Index number: 603-014-00-0, CAS: 111-76-2, EC: 203-905-0
Xn,Xi; R20/21/22-36/38
⚠ 3.3/2 Eye Irrit. 2 H319
⚠ 3.2/2 Skin Irrit. 2 H315
⚠ 3.1/4/Oral Acute Tox. 4 H302
⚠ 3.1/4/Dermal Acute Tox. 4 H312
⚠ 3.1/4/Inhal Acute Tox. 4 H332
- >= 1% - < 3% 2-methylpropan-1-ol; iso-butanol
REACH No.: 01-2119484609-23, Index number: 603-108-00-1, CAS: 78-83-1, EC: 201-148-0
Xi; R10-37/38-41-67
⚠ 2.6/3 Flam. Liq. 3 H226
⚠ 3.8/3 STOT SE 3 H335
⚠ 3.2/2 Skin Irrit. 2 H315
⚠ 3.3/1 Eye Dam. 1 H318
⚠ 3.8/3 STOT SE 3 H336
- >= 0.1% - < 0.25% ethanol; ethyl alcohol
REACH No.: 01-2119457610-43, Index number: 603-002-00-5, CAS: 64-17-5, EC: 200-578-6
F; R67-11; substance with a Community workplace exposure limit
⚠ 2.6/2 Flam. Liq. 2 H225
⚠ 3.8/3 STOT SE 3H335
- >= 0.1% - < 0.25% Fatty acids C18 with oleylamine
REACH No.: 05-2114084696-34, CAS: 147900-93-4, EC: 604-612-4
Xi,N; R51/53-43
⚠ 3.9/1 STOT RE 1 H372
⚠ 4.1/C2 Aquatic Chronic 2 H411
⚠ 3.4.2/1-1A-1B Skin Sens. 1,1A,1B H317
- >= 0.01% - < 0.1% ethylbenzene
REACH No.: 01-2119489370-35, Index number: 601-023-00-4, CAS: 100-41-4, EC: 202-849-4
F,Xn; R11-20-48/20-65
⚠ 2.6/2 Flam. Liq. 2 H225
⚠ 3.1/4/Inhal Acute Tox. 4 H332
⚠ 3.9/2 STOT RE 2 H373
⚠ 3.10/1 Asp. Tox. 1 H304

*DECLP: Substance classified accordingly to Note P of the Annex I of directive 67/548/EEC. The 'Carcinogenic' classification is not necessary if you can demonstrate that the substance contains less than 0.1% weight/weight of benzene

*DECL: Classified accordingly to directive 67/548/EEC

*DECLP (CLP): This substance is classified in accordance with Note P, Annex VI of EC Regulation 1272/2008. The classification as a carcinogen or mutagen need not apply if it can be shown that the substance contains less than 0,1 % w/w benzene (EINECS No 200-753-7). When the substance is not classified as a carcinogen at least the precautionary statements (P102-)P260-P262-P301 + P310-P331 (Table 3.1) or the S-phrases (2-)23-24-62 (Table 3.2) shall apply. This note applies only to certain complex oil-derived substances in Part 3.

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Immediately take off all contaminated clothing.

Areas of the body that have - or are only even suspected of having - come into contact with the product must be rinsed immediately with plenty of running water and possibly with soap.

Wash thoroughly the body (shower or bath).

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 under any circumstances induce vomiting. OBTAIN A MEDICAL EXAMINATION IMMEDIATELY.

In case of Inhalation:

If breathing is irregular or stopped, administer artificial respiration.

In case of inhalation, consult a doctor immediately and show him packing or label.



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- 4.2. Most important symptoms and effects, both acute and delayed
See section 11 for known symptoms and effects.
- 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:
None

SECTION 5: Firefighting measures

- 5.1. Extinguishing media
Suitable extinguishing media:
CO2 or Dry chemical fire extinguisher.
Extinguishing media which must not be used for safety reasons:
Do not use water jets. Water may not be effective fire fighting measure, however it can be used to cool closed containers close to flames as to avoid bursting and exploding.
- 5.2. Special hazards arising from the substance or mixture
Do not inhale explosion and combustion gases.
Burning produces heavy smoke.
- 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

- 6.1. Personal precautions, protective equipment and emergency procedures
Wear personal protection equipment.
Remove all sources of ignition.
Wear breathing apparatus if exposed to vapours/dusts/aerosols.
Provide adequate ventilation.
Use appropriate respiratory protection.
See protective measures under point 7 and 8.
- 6.2. Environmental precautions
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
Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations.
- 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.
Use localized ventilation system.
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.
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
Always keep the containers tightly closed.
Keep away from unguarded flame, sparks, and heat sources. Avoid direct exposure to sunlight.
Keep away from food, drink and feed.
Instructions as regards storage premises:
Cool and adequately ventilated.
- 7.3. Specific end use(s)
See Point 1.2.

SECTION 8: Exposure controls/personal protection

- 8.1. Control parameters
Xylene - CAS: 1330-20-7
ICR1 - LTE(8h): 221 mg/m³, 50 ppm - STE(): 442 mg/m³, 100 ppm - Notes: Assorbito attraverso la pelle
EU - LTE(8h): 221 mg/m³, 50 ppm - STE: 442 mg/m³, 100 ppm - Notes: Bold-type: Indicative Occupational Exposure Limit Values [2,3] and Limit Values for Occupational Exposure [4] (for references see bibliography)
ACGIH - LTE(8h): 100 ppm - STE: 150 ppm - Notes: A4, BEI - URT and eye irr, CNS impair
Solvent naphtha (petroleum), light arom. - CAS: 64742-95-6
EU - LTE(8h): 100 mg/m³, 19 ppm
2-butoxyethanol; ethylene glycol monobutyl ether - CAS: 111-76-2
ICR1 - LTE(8h): 98 mg/m³, 20 ppm - STE(): 246 mg/m³, 50 ppm - Notes: Pelle
EU - LTE(8h): 98 mg/m³, 20 ppm - STE: 246 mg/m³, 50 ppm - Notes: Bold-type: Indicative Occupational

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Exposure Limit Values [2,3] and Limit Values for Occupational Exposure [4] (for references see bibliography)

ACGIH - LTE(8h): 20 ppm - Notes: A3, BEI - Eye and URT irr

2-methylpropan-1-ol; iso-butanol - CAS: 78-83-1

ACGIH - LTE(8h): 50 ppm - Notes: Skin and eye irr

ethanol; ethyl alcohol - CAS: 64-17-5

EU - LTE: 1000 ppm

ACGIH - STE: 1000 ppm - Notes: A3 - URT irr

ethylbenzene - CAS: 100-41-4

ICR1 - LTE(8h): 442 mg/m³, 100 ppm - STE(): 884 mg/m³, 200 ppm - Notes: Pelle

EU - LTE(8h): 442 mg/m³, 100 ppm - STE: 884 mg/m³, 200 ppm - Notes: Bold-type: Indicative Occupational

Exposure Limit Values [2,3] and Limit Values for Occupational Exposure [4] (for references see bibliography)

ACGIH - LTE(8h): 20 ppm - Notes: A3, BEI - URT irr, kidney dam (nephropathy), cochlear impair

DNEL Exposure Limit Values

Xylene - CAS: 1330-20-7

Worker Professional: 289 mg/kg - Exposure: Human Inhalation - Frequency: Short Term, local effects

Worker Professional: 180 mg/kg - Consumer: 108 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects

Worker Professional: 77 mg/m³ - Consumer: 14.8 mg/m³ - Exposure: Human Inhalation - Frequency: Long Term, local effects

Consumer: 1.6 mg/kg - Exposure: Human Oral - Frequency: Long Term, systemic effects

2-butoxyethanol; ethylene glycol monobutyl ether - CAS: 111-76-2

Worker Professional: 75 mg/kg - Consumer: 38 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects

Worker Professional: 98 mg/m³ - Consumer: 49 mg/m³ - Exposure: Human Inhalation - Frequency: Long Term, systemic effects

Consumer: 3.2 mg/kg - Exposure: Human Oral - Frequency: Long Term, systemic effects

2-methylpropan-1-ol; iso-butanol - CAS: 78-83-1

Worker Professional: 310 mg/m³ - Consumer: 55 mg/m³ - Exposure: Human Inhalation - Frequency: Long Term, local effects

Consumer: 25 mg/kg - Exposure: Human Oral - Frequency: Long Term, systemic effects

ethanol; ethyl alcohol - CAS: 64-17-5

Worker Professional: 1900 mg/m³ - Consumer: 950 mg/m³ - Exposure: Human Inhalation - Frequency: Short Term, local effects

Worker Professional: 343 mg/kg - Consumer: 206 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects

Worker Professional: 950 mg/m³ - Consumer: 114 mg/m³ - Exposure: Human Inhalation - Frequency: Long Term, systemic effects

Consumer: 87 04 - Exposure: Human Oral - Frequency: Long Term, systemic effects

PNEC Exposure Limit Values

Xylene - CAS: 1330-20-7

Target: STP - Value: 6.58 mg/l

Target: Marine water - Value: 0.327 mg/l

Target: Intermittent emissions - Value: 0.327 mg/l

Target: Freshwater sediments - Value: 12.46 mg/kg

Target: Marine water sediments - Value: 12.46 mg/kg

Target: Soil - Value: 2.31 mg/kg

Target: Fresh Water - Value: 0.327 mg/l

2-butoxyethanol; ethylene glycol monobutyl ether - CAS: 111-76-2

Target: Purification plant - Value: 463 mg/l

Target: Freshwater sediments - Value: 34.6 mg/kg

Target: Marine water sediments - Value: 3.46 mg/kg

Target: Soil - Value: 3.13 mg/kg

Target: Intermittent emissions - Value: 9.1 mg/l

2-methylpropan-1-ol; iso-butanol - CAS: 78-83-1

Target: Marine water sediments - Value: 0.152 mg/kg

Target: Soil - Value: 0.0699 mg/kg

Target: Fresh Water - Value: 0.4 mg/l

Target: Marine water - Value: 0.04 mg/l

Target: Intermittent emissions - Value: 11 mg/l

Target: Purification plant - Value: 10 mg/l

Target: Freshwater sediments - Value: 1.52 mg/kg

ethanol; ethyl alcohol - CAS: 64-17-5

Target: Marine water - Value: 0.79 mg/l

Target: Intermittent emissions - Value: 2.75 mg/l

Target: Purification plant - Value: 580 mg/l

Target: Freshwater sediments - Value: 3.6 mg/kg

Target: Marine water sediments - Value: 2.9 mg/kg

Target: Soil - Value: 0.63 mg/kg

Target: Oral - Value: 0.72 g/kg

Target: Fresh Water - Value: 0.96 mg/l

8.2. Exposure controls

Eye protection:

Use face-mask or close fitting safety goggles (e.g. EN166 F3). Do not wear contact lenses.



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Protection for skin:

Wear safety clothing that ensure full skin protection in accordance to EN 14605 Type 4 in case of spills or spray (e.g. Tyrek). Please note: safety clothing must be changed immediately if it comes in contact with product.

Protection for hands:

Use protective gloves that provides comprehensive protection, EN374 Class 3 (B-F-I). Permeation time > 60 minutes; 0.4 mm thickness.

Respiratory protection:

Use adequate protective respiratory devices, using Filter "A" (Brown colour) for organic gas and vapors with boiling points over 65°C.

Thermal Hazards:

None

Environmental exposure controls:

Emissions from ventilation systems or from work processes must be check as to ensure compliance to environmental protection legislation. In some cases the addition of vapour scrubbers, filters or other system modification may be necessary in order to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance and colour:	Transparent liquid
Odour:	Typical disolvente
Odour threshold:	N.D.
pH:	N.A. (organic solvent)
Melting point / freezing point:	N.D.
Initial boiling point and boiling range:	135°C
Solid/gas flammability:	N.A.
Upper/lower flammability or explosive limits:	0,9 - 7 % vol
Vapour density:	N.D.
Flash point:	23°C
Evaporation rate:	N.D.
Vapour pressure:	6,5 - 9,5 hPa
Relative density:	1,64 ± 0,05 g/cm³
Solubility in water:	Insoluble
Solubility in oil:	N.D.
Auto-ignition temperature:	432°C - 528°C
Decomposition temperature:	N.D.
Viscosity:	N.D.
Explosive properties:	N.D.
Oxidizing properties:	N.D.

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions

10.2. Chemical stability

Stable under recommended use and storage conditions (see point 7).

10.3. Possibility of hazardous reactions

It may catch fire on contact with powerful oxidising agents.

10.4. Conditions to avoid

Avoid accumulating electrostatic charge.

10.5. Incompatible materials

Avoid contact with combustible materials. The product could catch fire.

10.6. Hazardous decomposition products

None.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological information of the mixture:

N.A.

Toxicological information of the main substances found in the mixture:

Epoxy resin (700<PM<=1100) - CAS: 25068-38-6

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat > 2 mg/kg

Test: LD50 - Route: Skin - Species: Rat > 2 mg/kg

Xylene - CAS: 1330-20-7

a) acute toxicity:

Test: LC50 - Route: Inhalation - Species: Rat = 6350 Ppm - Duration: 4h

Test: LD50 - Route: Oral - Species: Rat = 3523 mg/kg

Test: LD50 - Route: Skin - Species: Rabbit = 4350 mg/kg

Solvent naphtha (petroleum), light arom. - CAS: 64742-95-6

a) acute toxicity:

Test: LC50 - Route: Inhalation - Species: Rat > 6193 mg/m3

Test: LD50 - Route: Oral - Species: Rat = 3592 mg/kg

Test: LD50 - Route: Skin - Species: Rabbit > 3160 mg/kg

2-butoxyethanol; ethylene glycol monobutyl ether - CAS: 111-76-2

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a) acute toxicity:

Test: LC50 - Route: Inhalation - Species: Rat = 2-20 mg/l - Duration: 4h

Test: LD50 - Route: Oral - Species: Rat = 200-2000 mg/kg

Test: LD50 - Route: Skin - Species: Rat = 400-2000 mg/kg

2-methylpropan-1-ol; iso-butanol - CAS: 78-83-1

a) acute toxicity:

Test: LC50 - Route: Inhalation - Species: Rat > 18.18 mg/l - Duration: 6H

Test: LD50 - Route: Oral - Species: Rat > 2830 mg/kg

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

ethanol; ethyl alcohol - CAS: 64-17-5

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat = 21 g/kg

Test: LD50 - Route: Oral - Species: Rabbit = 6300 mg/kg

Test: LD50 - Route: Skin - Species: Rabbit = 20 g/kg

Fatty acids C18 with oleylamine - CAS: 147900-93-4

d) respiratory or skin sensitisation:

Test: Skin Sensitization - Route: Skin Positive

ethylbenzene - CAS: 100-41-4

a) acute toxicity:

Test: LC50 - Route: Inhalation - Species: Mouse = 35500 mg/m³

Test: LC50 - Route: Inhalation - Species: Rat = 55000 mg/m³

Test: LD50 - Route: Oral - Species: Rat = 3500 mg/kg

Solvent naphtha (petroleum), light arom. - CAS: 64742-95-6

ACUTE: Inhalation: Vapor concentration above recommended exposure levels may be irritating to the eyes and the respiratory tract, may cause headaches and dizziness, could be anesthetic and may other nervous system effects.

Skin contact: Low order of toxicity. Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis.

Eye contact: Will cause eye discomfort, but will not injure eye tissue.

Ingestion: Small amounts of liquid aspirated into the respiratory system during ingestion or from vomiting may cause bronchopneumonia or pulmonary edema. Minimal toxicity.

Liquid epoxy resin contained in this material causes only minor skin irritation. However, all epoxy resins are capable of causing sensitizing of the skin. Susceptibility to skin irritation and sensitization varies from person to person.

In a sensitized individual the allergic dermatitis may not appear until after several days or weeks of frequent and prolonged contact. Therefore, even though the skin irritation potential is slight, skin contact should be avoided.

Once sensitization has occurred, exposure of the skin to very small quantities of the material may cause erythema and edema.

If not differently specified, the information required in Regulation 453/2010/EC 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 working practices, so that the product is not released into the environment.

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

Epoxy resin (700<PM<=1100) - CAS: 25068-38-6

a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish = 1-10 mg/l

Endpoint: LC50 - Species: Algae = 1-10 mg/l

Endpoint: LC50 - Species: Daphnia = 1-10 mg/l

Solvent naphtha (petroleum), light arom. - CAS: 64742-95-6

a) Aquatic acute toxicity:

Endpoint: EC50 - Species: Daphnia = 3.2 mg/l - Duration h: 48

Endpoint: EC50 - Species: Algae = 2.9 mg/l - Duration h: 72

Endpoint: LC50 - Species: Fish = 9.2 mg/l

Endpoint: EC50 - Species: Algae = 1 mg/l - Notes: NOEC

12.2. Persistence and degradability

Product can be regarded as not easily degradable considering its component substances.

12.3. Bioaccumulative potential

Not bioaccumulative

12.4. Mobility in soil

Do not mix with waste water, rain or surface water. Floats on water, evaporates from liquid and solid surfaces but a significant amount may penetrate and pollute water table.

12.5. Results of PBT and vPvB assessment

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vPvB Substances: None - PBT Substances: None

12.6. Other adverse effects
None

SECTION 13: Disposal considerations

13.1. Waste treatment methods

The empty containers must be considered special waste materials to take to dump of type 2B. If previously cleansed, they can be admitted in first class dumps.
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.

SECTION 14: Transport information

Limited quantities, not subject to ADR norms for internal packaging of up to 5 litres and maximum packaging of 30kg.

14.1. UN number

ADR-UN number: 1263
IMDG-Un number: 1263

14.2. UN proper shipping name

Shipping name: Paints

14.3. Transport hazard class(es)

ADR/RID:
Class: 3
Label: 3
Classification Code: F1
Maritime (IMDG/IMO):
Class: 3.3
Label: 3

14.4. Packing group

ADR Packing Group:: III
IMDG-Packing group: III

14.5. Environmental hazards

Marine pollutant: No

14.6. Special precautions for user

IMDG-EMS: F- , S-E
E

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code
No

SECTION 15: Regulatory information

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

Dir. 67/548/EEC (Classification, packaging and labelling of dangerous substances)
Dir. 99/45/EC (Classification, packaging and labelling of dangerous preparations)
Dir. 98/24/EC (Risks related to chemical agents at work)
Dir. 2000/39/EC (Occupational exposure limit values)
Dir. 2006/8/EC
Regulation (EC) n. 1907/2006 (REACH)
Regulation (EC) n. 1272/2008 (CLP)
Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013
Regulation (EU) n. 453/2010 (Annex I)
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)
Regulation (EU) n. 605/2014 (ATP 6 CLP)

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

None

Volatile Organic compounds - VOCs = 227.52 g/Kg = 373.13 g/l

Volatile CMR substances = 0.00 %

Halogenated VOCs which are assigned the risk phrase R40 = 0.00 %

Organic Carbon - C = 0.20

Where applicable, refer to the following regulatory provisions :

Directive 82/501/EEC ('Activities linked to risks of serious accidents') and subsequent amendments.
Regulation (EC) nr 648/2004 (detergents).
1999/13/EC (VOC directive)

15.2. Chemical safety assessment

No

SECTION 16: Other information

Text of phrases referred to under heading 3:

R10 Flammable.
R11 Highly flammable.
R20 Harmful by inhalation.

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R20/21 Harmful by inhalation and in contact with skin.
R20/21/22 Harmful by inhalation, in contact with skin and if swallowed.
R36/37/38 Irritating to eyes, respiratory system and skin.
R36/38 Irritating to eyes and skin.
R37 Irritating to respiratory system.
R37/38 Irritating to respiratory system and skin.
R41 Risk of serious damage to eyes.
R43 May cause sensitization by skin contact.
R48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation.
R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R65 Harmful: may cause lung damage if swallowed.
R66 Repeated exposure may cause skin dryness or cracking.
R67 Vapours may cause drowsiness and dizziness.

H319 Causes serious eye irritation.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H226 Flammable liquid and vapour.
H332 Harmful if inhaled.
H312 Harmful in contact with skin.
H335 May cause respiratory irritation.
H373 May cause damage to organs through prolonged or repeated exposure if inhaled.
H304 May be fatal if swallowed and enters airways.
H336 May cause drowsiness or dizziness.
H411 Toxic to aquatic life with long lasting effects.
EUH066 Repeated exposure may cause skin dryness or cracking.
H302 Harmful if swallowed.
H318 Causes serious eye damage.
H225 Highly flammable liquid and vapour.
H372 Causes damage to organs through prolonged or repeated exposure.
H373 May cause damage to organs through prolonged or repeated exposure.

This safety data sheet has been completely updated in compliance to Regulation 453/2010/EU.

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

Main bibliographic sources:

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

SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold

CCNL - Appendix 1

Insert further consulted bibliography

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 Society).
CLP: Classification, Labeling, Packaging.
DNEL: Derived No Effect Level.
EINECS: European Inventory of Existing Commercial Chemical Substances.
GHS: Globally Harmonized System of Classification and Labeling of Chemicals.
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.
N.A.: Not applicable.
N.D.: Not determined.
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).