1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product information

Product name : EPODUR

Product code : L0290170

Company : Lechler SpA
Via Cecilio 17
22100 Como
Telephone : +39031586111
Telefax : +39031586206

In order to get more information and in case of emergencies please address to Lechler Group Security Office. (Tel. +39-031-586.301).

: Tel. +39-031-586301
Fax +39-031-586299

2. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature : Dual compound enamel - finish coat

Hazardous components :

Components	CAS-No.	EEC-No.	Symbol(s)	R-phrase(s)	Concentration [%]
Toluene	108-88-3	601-021-00-3	Xn, F	R11, R65, R38, R63, R67, R48/20	>= 3 - < 5
Xylene	1330-20-7	601-022-00-9	Xn	R20/21, R38, R10	>= 12,5 - < 20
Monopropylene Glycol Methyl Ether	107-98-2	603-064-00-3		R10	>= 5 - < 7
Epoxy Resin (number average molecular weight <700)	25068-38-6	603-074-00-8	Xi, N	R43, R36/38, R51/53	>= 30 - < 50
Ethyl Methyl Ketone	78-93-3	606-002-00-3	Xi, F	R11, R66, R67, R36	>= 3 - < 5
Methyl Isobutyl Ketone	108-10-1	606-004-00-4	F, Xn	R11, R20, R66, R36/37	>= 7 - < 10

3. HAZARDS IDENTIFICATION


Harmful


Dangerous for the environment


Highly flammable

Hazardous components : Epoxy Resin (number average molecular weight <700)XyleneMethyl Isobutyl Ketone1,2,4-trimethylbenzene

R-phrase(s) :
Highly flammable.
Harmful by inhalation and in contact with skin.
Irritating to eyes and skin.
May cause sensitization by skin contact.
Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

S-phrase(s) :
Do not breathe spray.
Avoid contact with skin.
In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
Wear suitable protective clothing and gloves.

Exceptional labelling of special preparations :
Contains epoxy constituents. See information supplied by the manufacturer.

4. FIRST AID MEASURES

General advice	:	When symptoms persist or in all cases of doubt seek medical advice. Never give anything by mouth to an unconscious person.
After Inhalation	:	Remove to fresh air. Keep patient warm and at rest. If breathing is irregular or stopped, administer artificial respiration. If unconscious place in recovery position and seek medical advice.
After Skin contact	:	Take off all contaminated clothing immediately. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners. Put shower on working place
After Eye contact	:	Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart. Remove contact lenses. Seek medical advice. Put eye-washer on working place
After Ingestion	:	If accidentally swallowed obtain immediate medical attention. Keep at rest. Do not induce vomiting.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media	:	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Keep containers and surroundings cool with water spray.

Extinguishing media which must not be used for safety reasons	:	Do NOT use water jet.
Specific hazards during fire fighting	:	As the product contains combustible organic components, fire will produce dense black smoke containing hazardous products of combustion (see section 10). Exposure to decomposition products may be a hazard to health. Cool closed containers exposed to fire with water spray. Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
Special protective equipment for fire-fighters	:	Wear self contained breathing apparatus for fire fighting if necessary.

6. ACCIDENTAL RELEASE MEASURES

Environmental precautions	:	Try to prevent the material from entering drains or water courses. If the product contaminates rivers and lakes or drains inform respective authorities.
Methods for cleaning up	:	Clean with detergents. Avoid solvents. Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth, diatomaceus earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).
Additional advice	:	Refer to section 15 for specific national regulation.

7. HANDLING AND STORAGE

Handling

Safe handling advice	:	Avoid exceeding of the given occupational exposure limits (see section 8). Use only in area provided with appropriate exhaust ventilation. Avoid contact with skin, eyes and clothing. Smoking, eating and drinking should be prohibited in the application area. Avoid inhalation of vapour or mist. For personal protection see section 8. Thoroughly mix before using After using, store in a well-sealed container
Advice on protection against fire and explosion	:	Prevent the creation of flammable or explosive concentrations of vapour in air and avoid vapour concentration higher than the occupational exposure limits. When transferring from one container to another apply earthing measures and use conductive hose material. No sparking tools should be used. The product should only be used in areas from which all naked lights and other sources of ignition have been excluded. No smoking.

Storage

Requirements for storage areas and containers : Observe label precautions.
Containers which are opened must be carefully resealed and kept upright to prevent leakage.
Solvent vapours are heavier than air and may spread along floors.
Vapours may form explosive mixtures with air.
Electrical installations / working materials must comply with the technological safety standards.
Keep away from sources of ignition - No smoking.
Store between 5° an 35°C in a dry, well ventilated place away from source of heat, ignition and direct sunlight.
Store in accordance with the particular national regulations.

Advice on common storage : Keep away from oxidising agents and strongly acid or alkaline materials.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value [mg/m^3]	Value [ppm]	Basis
Toluene	108-88-3	188,00	50,00	
Xylene	1330-20-7	221,00	50,00	
Monopropylene Glycol Methyl Ether	107-98-2	375,00	100,00	
Ethyl Methyl Ketone	78-93-3	600,00	200,00	
Methyl Isobutyl Ketone	108-10-1	205,00	50,00	

Personal protective equipment

Respiratory protection : Apply technical measures to comply with the occupational exposure limits.
This should be achieved by a good general extraction and -if practically feasible- by the use of a local exhaust ventilation.
If the occupational exposure limits cannot be met, in exceptional cases suitable respiratory equipment should be worn only for a short period of time.

Hand protection : For prolonged or repeated contact use protective gloves.
Barrier creams may help to protect the exposed areas of skin, they should however not be applied once exposure has occurred.
Skin should be washed after contact.
Wash your hands and put on barrier creams

Eye protection : Chemical resistant goggles must be worn.

Skin and body protection : Skin should be washed after contact.
Working clothes must not consist of textiles, which show a dangerous melting behaviour in case of fire.
Personnel should wear protective clothing
Workers should wear antistatic footwear.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form	:	liquid
Flash point	:	0 - 21 °C
Density	:	1,06 g/cm3
Viscosity	:	<= 60 s Transversale section: 6 mm Method: 2431 '84 (ISO 6)
Solids by weight	:	55 %

10. STABILITY AND REACTIVITY

Conditions to avoid	:	Our products were manufactured in compliance with safety standards to avoid decomposition and degrading under the defined conditions. Taking the product type into account, it is advisable to leave the product in its original packaging thus avoiding transferring it.
Hazardous reactions	:	Keep away from oxidising agents, strongly alkaline and strongly acid materials in order to avoid exothermic reactions.

11. TOXICOLOGICAL INFORMATION

Acute inhalation toxicity	:	Exposure to component solvent vapours concentration in excess of the stated occupational exposure limit may result in adverse health effects. Such as: mucous membrane irritation, respiratory system irritation, adverse effects on kidney, liver and central nervous system. Symptoms and signs: headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases loss of consciousness. Inhalation of airborne droplets may cause irritation of the respiratory tract.
Skin irritation	:	Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in desiccation of the skin. The product may be absorbed through the skin.
Note	:	The concentration of each substance should be borne in mind in assessing the toxicological effects deriving from the preparation.

Toluene	OBSERVATIONS ON HUMAN SUBJECTS - NON PROFESSIONAL EXPOSURE : Effects due to an acute exposure : A test made on a group of people exposed to 50-800 ppm inhalation for 8 hours gave the following outcome: 200 ppm: light but definite diminution of coordination, time of reaction, weariness, confusion, skin paraesthesia; weariness lasted for hours together with a light insomnia. 400 ppm: worsening of the symptoms and mental confusion. 600 ppm after 3 hours: extreme weariness, mental confusion, loss of control, lack of coordination, nausea, headache, loss of balance. After 8 hours these symptoms worsen and there is also dilation of the pupil and defects in adaptation to the light. 800 ppm: the same symptoms but much more accentuated.

12. ECOLOGICAL INFORMATION

Further information : The product contains dangerous substances for the environment (see chapter n° 2), The concentration of each substance should be borne in mind in assessing the toxicological effects deriving from the preparation.

Epoxy Resin (number average molecular weight <700)	R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

13. DISPOSAL CONSIDERATIONS

Product : The product should not be allowed to enter drains, water courses or the soil.
Disposal together with normal waste is not allowed. Special disposal required according to local regulations.

14. TRANSPORT INFORMATION

ADR	UN-No	**1263**
	Class	3
	Code	F1
	Packaging group	II
	Description of the goods	PAINT (vapour pressure at 50°C not more than 110 kPa)
IMDG	UN-No	**1263**
	Class	3
	EmS	F-E, S-E
	Packaging group	II
	Marine pollutant	
	Description of the goods	PAINT
IATA	UN-No	**1263**
	Class	3
	Packaging group	II
	Description of the goods	Paint

15. REGULATORY INFORMATION

Hazardous components which must be listed on the label:

- Epoxy Resin (number average molecular weight <700)
- Xylene
- Methyl Isobutyl Ketone
- 1,2,4-trimethylbenzene

Symbol(s)	:	Xn	Harmful
		N	Dangerous for the environment
		F	Highly flammable
R-phrase(s)	:	R11	Highly flammable.
		R20/21	Harmful by inhalation and in contact with skin.
		R36/38	Irritating to eyes and skin.
		R43	May cause sensitization by skin contact.
		R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
S-phrase(s)	:	S23	Do not breathe spray.
		S24	Avoid contact with skin.
		S26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
		S36/37	Wear suitable protective clothing and gloves.
Exceptional labelling of special preparations	:		
Exceptional labelling of special preparations	:	Contains epoxy constituents. See information supplied by the manufacturer.	

National legislation

Germany

Risk classification according to BetrSichV (Germany)	:	AI
Water contaminating class (Germany)	:	water endangering
Acute toxicity (other route)	:	Repeated skin contact may lead to irritation and to sensitization, possible with cross-sensitization to other epoxys.

16. OTHER INFORMATION

Further information

Toluene	R11	Highly flammable.
	R65	Harmful: may cause lung damage if swallowed.
	R38	Irritating to skin.
	R63	Possible risk of harm to the unborn child.
	R67	Vapours may cause drowsiness and dizziness.
	R48/20	Harmful: danger of serious damage to health by prolonged exposure through inhalation.

Xylene	R20/21	Harmful by inhalation and in contact with skin.
	R38	Irritating to skin.
	R10	Flammable.
Monopropylene Glycol Methyl Ether	R10	Flammable.
Epoxy Resin (number average molecular weight <700)	R43	May cause sensitization by skin contact.
	R36/38	Irritating to eyes and skin.
	R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Ethyl Methyl Ketone	R11	Highly flammable.
	R66	Repeated exposure may cause skin dryness or cracking.
	R67	Vapours may cause drowsiness and dizziness.
	R36	Irritating to eyes.
Methyl Isobutyl Ketone	R11	Highly flammable.
	R20	Harmful by inhalation.
	R66	Repeated exposure may cause skin dryness or cracking.
	R36/37	Irritating to eyes and respiratory system.

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

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SDS updated to the last adjustment of EEC directive 67/548/CE, 1999/45/CE.