

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

1.1. Product identifier

Product form : Mixture
Trade name : IMPREG Liner GL01/GL13/GL16

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

1.2.1. Relevant identified uses

Use of the substance/mixture : Fibre glass hose liner for trenchless pipe rehabilitation

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Supplier

IMPREG GmbH
Eisenbahnstr. 32
P.O. Box 72119
Ammerbuch - Deutschland
T +49-7073-300310 - F +49-7073-30031-19
info@impreg.de

Safety Data Sheet

info@ubsplus.de

1.4. Emergency telephone number

Emergency number : +49 761 19240
(VIZ Freiburg, 24 h, German & English)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Skin Irrit. 2	H315
Eye Irrit. 2	H319
Repr. 2	H361
STOT SE 3	H335
STOT RE 1	H372
Aquatic Chronic 3	H412

Full text of H statements : see section 16

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS07

GHS08

Signal word (CLP) : Danger

Hazardous ingredients : styrene

Hazard statements (CLP) : H315 - Causes skin irritation.
H319 - Causes serious eye irritation.
H335 - May cause respiratory irritation.
H361 - Suspected of damaging fertility or the unborn child.
H372 - Causes damage to organs through prolonged or repeated exposure.
H412 - Harmful to aquatic life with long lasting effects.

Precautionary statements (CLP) : P201 - Obtain special instructions before use.
P264 - Wash hands thoroughly after handling.
P270 - Do not eat, drink or smoke when using this product.
P308+P313 - IF exposed or concerned: Get medical advice/attention.
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.
P410+P403 - Protect from sunlight. Store in a well-ventilated place.



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EUH-statements : EUH208 - Contains tert-butyl 2-ethylperoxyhexanoate(3006-82-4). May produce an allergic reaction.

2.3. Other hazards

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Comments (on top of composition) : The content of styrene in the ready-for-use product is presumably considerably under the value given below, which was calculated based on the ratios of the used raw materials.

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
styrene	(CAS-No.) 100-42-5 (EC-No.) 202-851-5 (EC Index-No.) 601-026-00-0	<25	Flam. Liq. 3, H226 Acute Tox. 4 (Inhalation), H332 Acute Tox. 4 (Inhalation:dust,mist), H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Repr. 2, H361d STOT SE 3, H335 STOT RE 1, H372 Asp. Tox. 1, H304 Aquatic Chronic 3, H412
tert-butyl 2-ethylperoxyhexanoate	(CAS-No.) 3006-82-4 (EC-No.) 221-110-7 (REACH-no) 01-2119498310-40	<0,6	Org. Perox. C, H242 Skin Sens. 1, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Diethylhexyl maleate	(CAS-No.) 142-16-5 (EC-No.) 205-524-5	<0,4	STOT RE 2, H373 Aquatic Chronic 1, H410

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Move the affected person away from the contaminated area. Fresh air, rest. Prevent cooling by covering the victim (no warming up). If unconscious place in recovery position and seek medical advice. Do not give an unconscious person anything to drink. Remove soiled clothing promptly.

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. If you feel unwell, seek medical advice.

First-aid measures after skin contact : Immediately remove contaminated clothing or footwear. Rinse and then wash skin thoroughly with water and soap. If skin irritation or rash occurs: Get medical advice/attention. Do not pull solidified product away from the skin.

First-aid measures after eye contact : Wash with plenty of water (during 20 minutes minimum) with eyes wide open after taking off soft contact lenses and immediately take medical advice.

First-aid measures after ingestion : Rinse mouth. Do not give an unconscious person anything to drink. Do not induce vomiting. Immediately call a POISON CENTER/doctor.

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

Symptoms/effects after inhalation : May cause respiratory irritation. hearing organs : Risk of serious damage.

Symptoms/effects after skin contact : Causes skin irritation.

Symptoms/effects after eye contact : Causes serious eye irritation.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : water, carbon dioxide (CO2), powder and foam.

Unsuitable extinguishing media : Not known.



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5.2. Special hazards arising from the substance or mixture

- Fire hazard : Combustible solids.
Explosion hazard : Not known.
Hazardous decomposition products in case of fire : Carbon dioxide. Carbon monoxide.

5.3. Advice for firefighters

- Precautionary measures fire : Making extinguishing agents environment-friendly. Evacuate area.
Firefighting instructions : Do not allow run-off from fire fighting to enter drains or water courses. Do not contaminate ground and surface water.
Protection during firefighting : Extra personal protection: complete protective clothing including self-contained breathing apparatus.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- General measures : Evacuate the danger area. Keep public away from danger area. Mark the danger area.

6.1.1. For non-emergency personnel

- Protective equipment : Wear personal protective equipment.

6.1.2. For emergency responders

- Protective equipment : Wear personal protective equipment. Breathing apparatus.

6.2. Environmental precautions

- Prevent entry to sewers and public waters.

6.3. Methods and material for containment and cleaning up

- For containment : Dike and contain spill. Let solidify. Place in a suitable container for disposal in accordance with the waste regulations (see Section 13).
Methods for cleaning up : Leave the product to solidify. Mechanically recover the product.

6.4. Reference to other sections

- Fire fighting measures. SECTION 5. Personal protective equipment. SECTION 8. Disposal considerations. SECTION 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Additional hazards when processed : Not to be used for any purpose other than the one the product was designed for. When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.
Hygiene measures : Keep away from food, drink and animal feeding stuffs. Do not eat, drink or smoke when using this product. Wash hands and other exposed areas with soap and water before leaving work. Apply emollient cream.

7.2. Conditions for safe storage, including any incompatibilities

- Technical measures : Use only in well ventilated areas.
Storage conditions : Store in a dry, cool and well-ventilated place. Protect from sunlight.
Storage temperature : 5 - 25 °C
Heat and ignition sources : Store away from direct sunlight or other heat sources.
Special rules on packaging : Keep in original containers.

7.3. Specific end use(s)

- No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

styrene (100-42-5)		
EU	Local name	Styrene
EU	Notes	(Ongoing)

styrene (100-42-5)	
DNEL/DMEL (Workers)	
Acute - systemic effects, inhalation	289 mg/m ³
Acute - local effects, inhalation	306 mg/m ³
Long-term - systemic effects, dermal	406 mg/kg bw/d
Long-term - systemic effects, inhalation	85 mg/m ³



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styrene (100-42-5)	
DNEL/DMEL (General population)	
Acute - systemic effects, inhalation	174.25 mg/m ³
Acute - local effects, inhalation	182.75 mg/m ³
Long-term - systemic effects, oral	2.1 mg/kg bw/d
Long-term - systemic effects, inhalation	10.2 mg/m ³
Long-term - systemic effects, dermal	343 mg/kg bw/d
PNEC (Water)	
PNEC aqua (freshwater)	0.028 mg/l
PNEC aqua (marine water)	0.014 mg/l
PNEC aqua (intermittent, freshwater)	0.04 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	0.614 mg/kg dwt
PNEC sediment (marine water)	0.307 mg/kg dwt
PNEC (Soil)	
PNEC soil	0.2 mg/kg dwt
PNEC (STP)	
PNEC sewage treatment plant	5 mg/l

8.2. Exposure controls

Appropriate engineering controls	: Ensure good ventilation of the work station.
Materials for protective clothing	: Wear proper protective equipment
Hand protection	: In case of contact with the skin : Chemically resistant protective gloves. Choosing the proper glove is a decision that depends not only on the type of material, but also on other quality features, which differ for each manufacturer. . Penetration time of glove material : >480 min (EN 374). Material : Nitrile rubber : 0,7 mm
Eye protection	: Direct eye contact is unlikely. In case of contact with the eyes : Safety glasses
Respiratory protection	: Not necessary with sufficient ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Breathing apparatus with filter. Filter type: A (DIN EN 14387). Appropriate self-contained breathing apparatus may be required
Environmental exposure controls	: Avoid release to the environment.
Other information	: Do not inhale vapour. Personal protective equipment should be chosen according to the CEN standards and in discussion with the supplier of the protective equipment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Solid
Colour	: light yellow
Odour	: Styrene
Odour threshold	: No data available
pH	: Not determined
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: Not determined
Freezing point	: No data available
Boiling point	: Not determined
Flash point	: Not applicable
Auto-ignition temperature	: Not determined
Decomposition temperature	: No data available
Flammability (solid, gas)	: Not classified (UN N.1)
Vapour pressure	: Not determined
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Density	: ca. 1.1 g/cm ³
Solubility	: Soluble in water with difficulty.
Log Pow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: > 350000 mPa.s



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Explosive properties : Not known.
Oxidising properties : Not known.
Explosive limits : No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

May polymerise.

10.3. Possibility of hazardous reactions

Polymerisation can occur.

10.4. Conditions to avoid

Keep away from heat and direct sunlight.

10.5. Incompatible materials

Oxidizing agent.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

styrene (100-42-5)	
LD50 oral rat	> 5000 mg/kg
LD50 dermal rat	> 2000 mg/kg
LC50 inhalation rat (mg/l)	10 - 20 mg/l/4h
PHENYLDIMETHOXYACETOPHENONE (24650-42-8)	
LD50 oral rat	> 2000 mg/kg
LD50 dermal rat	> 2000 mg/kg
phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide (162881-26-7)	
LD50 oral rat	> 2000 mg/kg
LD50 dermal rat	> 2000 mg/kg

Skin corrosion/irritation : Causes skin irritation.
Calculation method
pH: Not determined

Serious eye damage/irritation : Causes serious eye irritation.
Calculation method
pH: Not determined

Respiratory or skin sensitisation : Not classified (Based on available data, the classification criteria are not met)

Germ cell mutagenicity : Not classified (Based on available data, the classification criteria are not met)

Carcinogenicity : Not classified (Based on available data, the classification criteria are not met)

Reproductive toxicity : Suspected of damaging fertility or the unborn child.
Calculation method

STOT-single exposure : May cause respiratory irritation.
Calculation method

STOT-repeated exposure : Causes damage to organs through prolonged or repeated exposure.
Calculation method
Target organ(s) :
hearing sense

styrene (100-42-5)	
LOAEL (oral, rat, 90 days)	2000 mg/kg bodyweight/day
NOAEL (oral, rat, 90 days)	1000 mg/kg bodyweight/day
NOAEC, Chronic, Inhalation, rat, systemic	= 0,21 mg/l (104 weeks)
LOAEC, subacute, Inhalation, rat, systemic	= 500 ppm (6 Hours)



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styrene (100-42-5)	
NOAEC, subacute, Inhalation, rat, systemic	= 150 ppm (6 Hours)
phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide (162881-26-7)	
NOAEL (oral, rat, 90 days)	1000 mg/kg bodyweight/day
Aspiration hazard : Not classified (Based on available data, the classification criteria are not met)	
IMPREG Liner GL01/GL13/GL16	
Viscosity, kinematic	318182 mm ² /s

SECTION 12: Ecological information

12.1. Toxicity

Acute aquatic toxicity : Not classified
 Chronic aquatic toxicity : Harmful to aquatic life with long lasting effects.

styrene (100-42-5)	
LC50 fish 1	10 mg/l
EC50 Daphnia 1	4.7 mg/l
NOEC chronic crustacea	1.01 mg/l (daphnia, 21 d)

12.2. Persistence and degradability

IMPREG Liner GL01/GL13/GL16	
Persistence and degradability	Contains non readily biodegradable component(s).
styrene (100-42-5)	
Persistence and degradability	Readily biodegradable.
Biodegradation	73.2 % (28 d)

12.3. Bioaccumulative potential

IMPREG Liner GL01/GL13/GL16	
Bioaccumulative potential	Not determined.
styrene (100-42-5)	
Bioconcentration factor (BCF REACH)	13.49
Log Pow	3
Bioaccumulative potential	Low.

12.4. Mobility in soil

IMPREG Liner GL01/GL13/GL16	
Ecology - soil	No supplementary information available.

12.5. Results of PBT and vPvB assessment

IMPREG Liner GL01/GL13/GL16	
This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII	
This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII	

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional legislation (waste) : This material and its container must be disposed of in a safe way, and as per local legislation.
 Waste treatment methods : Let solidify. In general : Non hazardous waste.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

ADR	IMDG	IATA	ADN	RID
14.1. UN number				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.2. UN proper shipping name				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.3. Transport hazard class(es)				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated



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ADR	IMDG	IATA	ADN	RID
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.4. Packing group				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.5. Environmental hazards				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
No supplementary information available				

14.6. Special precautions for user

- Overland transport

Not regulated

- Transport by sea

Not regulated

- Air transport

Not regulated

- Inland waterway transport

Not regulated

- Rail transport

Not regulated

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

IBC code : Not applicable.

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

Other information, restriction and prohibition regulations : Ozone layer depleting substances: Not subject to Regulation (EC) No 1005/2009. Persistent organic pollutants (POPs): Not subject to Regulation (EC) No 850/2004. Export and import of dangerous chemicals: Not subject to Regulation (EC) No 649/2012. Control of major-accident hazards (COMAH, Seveso III): Not subject to Directive 2012/18/EC.

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

Not applicable

SECTION 16: Other information

Indication of changes:			
Section	Changed item	Change	Comments
2	Classification & Labelling	Modified	
4.2	Symptoms/effects	Modified	
8.2	Personal protective equipment	Added	
9.1	Flammability :	Modified	
14	Transport regulations	Modified	

Full text of H- and EUH-statements:

Acute Tox. 4 (Inhalation) Acute toxicity (inhal.), Category 4



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Acute Tox. 4 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 4
Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment — Chronic Hazard, Category 1
Aquatic Chronic 3	Hazardous to the aquatic environment — Chronic Hazard, Category 3
Asp. Tox. 1	Aspiration hazard, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Liq. 3	Flammable liquids, Category 3
Org. Perox. C	Organic Peroxides, Type C
Repr. 2	Reproductive toxicity, Category 2
Repr. 2	Reproductive toxicity, Category 2
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Skin sensitisation, Category 1
STOT RE 1	Specific target organ toxicity — Repeated exposure, Category 1
STOT RE 2	Specific target organ toxicity — Repeated exposure, Category 2
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
H226	Flammable liquid and vapour.
H242	Heating may cause a fire.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H361	Suspected of damaging fertility or the unborn child.
H361d	Suspected of damaging the unborn child.
H372	Causes damage to organs through prolonged or repeated exposure.
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
EUH208	Contains tert-butyl 2-ethylperoxyhexanoate(3006-82-4). May produce an allergic reaction.

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Skin Irrit. 2	H315	Calculation method
Eye Irrit. 2	H319	Calculation method
Repr. 2	H361	Calculation method
STOT SE 3	H335	Calculation method
STOT RE 1	H372	Calculation method
Aquatic Chronic 3	H412	Calculation method

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product