

## Safety Data Sheet dated 4/5/2017, version 1

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

#### 1.1. Product identifier

Mixture identification:

Trade name: POLYLAC SATINE' BIANCO

Trade code: 210250L

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

Recommended use:

Solvent - based enamel

Uses advised against:

None Known

#### 1.3. Details of the supplier of the safety data sheet

Company:

Linvea srl

via Benedetto Croce, 2/4

80026 Arpino Casoria (NA)-ITALY

Tel. +39 081 759 09 22

Fax +39 081 759 77 07

Competent person responsible for the safety data sheet:

dalisalessandro@linvea.it

#### 1.4. Emergency telephone number

Centro Antiveleni - A.O.R.N. "A. Cardarelli" - Napoli -

tel.+39 081 7472870-5453333, Fax +39 081 7472868

24/24 h

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

EC regulation criteria 1272/2008 (CLP):

Warning, Flam. Liq. 3, Flammable liquid and vapour.

Danger, Asp. Tox. 1, May be fatal if swallowed and enters airways.

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:

H226 Flammable liquid and vapour.

H304 May be fatal if swallowed and enters airways.

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.

P233 Keep container tightly closed.

P240 Ground/bond container and receiving equipment.

P241 Use explosion-proof electrical/ventilating/lighting/equipment.

P242 Use only non-sparking tools.

P243 Take precautionary measures against static discharge.

P273 Avoid release to the environment.

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

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor/...

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P331 Do NOT induce vomiting.

P370+P378 In case of fire: Use ... to extinguish.

P403+P235 Store in a well-ventilated place. Keep cool.

P405 Store locked up.

P501 Dispose of contents/container in accordance with applicable regulations.

Special Provisions:

None

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:

Qty	Name	Ident. Number	Classification						
14.1 %	Idrocarburi ,C9-C12,n-alcani,isolacani-ciclici,aromatici(2-25%)	<table border="1"> <tr> <td>CAS:</td> <td>1174921-79-9</td> </tr> <tr> <td>EC:</td> <td>919-446-0</td> </tr> </table>	CAS:	1174921-79-9	EC:	919-446-0	2.6/3 Flam. Liq. 3 H226 3.10/1 Asp. Tox. 1 H304 3.8/3 STOT SE 3 H336 4.1/C2 Aquatic Chronic 2 H411 EUH066		
CAS:	1174921-79-9								
EC:	919-446-0								
2.19 %	2-methoxy-1-methylethyl acetate	<table border="1"> <tr> <td>Index number:</td> <td>607-195-00-7</td> </tr> <tr> <td>CAS:</td> <td>108-65-6</td> </tr> <tr> <td>EC:</td> <td>203-603-9</td> </tr> </table>	Index number:	607-195-00-7	CAS:	108-65-6	EC:	203-603-9	2.6/3 Flam. Liq. 3 H226
Index number:	607-195-00-7								
CAS:	108-65-6								
EC:	203-603-9								
1.83 %	o-xylene	<table border="1"> <tr> <td>Index number:</td> <td>601-022-00-9</td> </tr> <tr> <td>CAS:</td> <td>1330-20-7</td> </tr> <tr> <td>EC:</td> <td>215-535-7</td> </tr> </table>	Index number:	601-022-00-9	CAS:	1330-20-7	EC:	215-535-7	2.6/3 Flam. Liq. 3 H226 3.2/2 Skin Irrit. 2 H315 3.1/4/Dermal Acute Tox. 4 H312 3.1/4/Inhal Acute Tox. 4 H332
Index number:	601-022-00-9								
CAS:	1330-20-7								
EC:	215-535-7								
0.647 %	2-methylpropan-1-ol; iso-butanol	<table border="1"> <tr> <td>Index number:</td> <td>603-108-00-1</td> </tr> <tr> <td>CAS:</td> <td>78-83-1</td> </tr> <tr> <td>EC:</td> <td>201-148-0</td> </tr> </table>	Index number:	603-108-00-1	CAS:	78-83-1	EC:	201-148-0	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
Index number:	603-108-00-1								
CAS:	78-83-1								
EC:	201-148-0								
		616	3.6/2 Carc. 2						

0.4 %	2-butanone oxime; ethyl methyl ketoxime; ethyl methyl ketone oxime	<table border="1"> <tr> <td>Index number:</td> <td>010-014-00-0</td> </tr> <tr> <td>CAS:</td> <td>96-29-7</td> </tr> <tr> <td>EC:</td> <td>202-496-6</td> </tr> </table>	Index number:	010-014-00-0	CAS:	96-29-7	EC:	202-496-6	H351 3.3/1 Eye Dam. 1 H318 3.4.2/1-1A-1B Skin Sens. 1,1A,1B H317 3.1/4/Dermal Acute Tox. 4 H312
Index number:	010-014-00-0								
CAS:	96-29-7								
EC:	202-496-6								
0.154 %	Bis(2-Etilsesanoato) di cobalto	<table border="1"> <tr> <td>CAS:</td> <td>136-52-7</td> </tr> <tr> <td>EC:</td> <td>205-250-6</td> </tr> </table>	CAS:	136-52-7	EC:	205-250-6	3.10/1 Asp. Tox. 1 H304 4.1/A1 Aquatic Acute 1 H400 3.3/2 Eye Irrit. 2 H319 3.4.2/1-1A-1B Skin Sens. 1,1A,1B H317 3.7/2 Repr. 2 H361 4.1/C1 Aquatic Chronic 1 H410		
CAS:	136-52-7								
EC:	205-250-6								
0.1 %	Solvent naphtha (petroleum), heavy arom.; Kerosine "unspecified"; [A complex combination of hydrocarbons obtained from distillation of aromatic streams. It consists predominantly	<table border="1"> <tr> <td>Index number:</td> <td>649-424-00-3</td> </tr> <tr> <td>CAS:</td> <td>64742-94-5</td> </tr> <tr> <td>EC:</td> <td>265-198-5</td> </tr> </table>	Index number:	649-424-00-3	CAS:	64742-94-5	EC:	265-198-5	3.2/2 Skin Irrit. 2 H315 3.4.2/1-1A-1B Skin Sens. 1,1A,1B H317 3.9/2 STOT RE 2 H373 4.1/A1 Aquatic Acute 1 H400 4.1/C1 Aquatic Chronic 1 H410 3.6/2 Carc. 2 H351 3.8/3 STOT SE 3 H336
Index number:	649-424-00-3								
CAS:	64742-94-5								
EC:	265-198-5								
20 ppm	naphthalene	<table border="1"> <tr> <td>Index number:</td> <td>601-052-00-2</td> </tr> <tr> <td>CAS:</td> <td>91-20-3</td> </tr> <tr> <td>EC:</td> <td>202-049-5</td> </tr> </table>	Index number:	601-052-00-2	CAS:	91-20-3	EC:	202-049-5	3.6/2 Carc. 2 H351 4.1/A1 Aquatic Acute 1 H400 4.1/C1 Aquatic Chronic 1 H410 3.1/4/Oral Acute Tox. 4 H302
Index number:	601-052-00-2								
CAS:	91-20-3								
EC:	202-049-5								
1 ppm	ethanediol; ethylene glycol	<table border="1"> <tr> <td>Index number:</td> <td>603-027-00-1</td> </tr> <tr> <td>CAS:</td> <td>107-21-1</td> </tr> <tr> <td>EC:</td> <td>203-473-3</td> </tr> </table>	Index number:	603-027-00-1	CAS:	107-21-1	EC:	203-473-3	3.1/4/Oral Acute Tox. 4 H302
Index number:	603-027-00-1								
CAS:	107-21-1								
EC:	203-473-3								
		<table border="1"> <tr> <td>Index</td> <td>007-</td> </tr> </table>	Index	007-	2.2/2 Flam. Gas 2 H221 2.5 Press.				
Index	007-								

36 ppb	ammonia, anhydrous	index number:	001- 00-5	Gas H280 3.2/1B Skin Corr. 1B H314 4.1/A1 Aquatic Acute 1 H400 3.1/3/Inhal Acute Tox. 3 H331
		CAS:	7664- 41-7	
		EC:	231- 635-3	

#### SECTION 4: First aid measures

##### 4.1. Description of first aid measures

In case of skin contact:

Wash with plenty of water and soap.

Remove contaminated clothing immediately and dispose off safely.

In case of eyes contact:

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

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

None

##### 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:

In case of fire: Use ... to extinguish.

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.

##### 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.

Remove persons to safety.

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

Wash with plenty of water.

##### 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.

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 in a well ventilated place.

Store at below 20 °C. Keep away from unguarded flame and heat sources. Avoid direct exposure to sunlight.

Keep away from unguarded flame, sparks, and heat sources. Avoid direct exposure to sunlight.

Avoid accumulating electrostatic charge.

Keep away from food, drink and feed.

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Cool and adequately ventilated.

Safety electric system.

#### 7.3. Specific end use(s)

None in particular

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

Idrocarburi ,C9-C12,n-alcani,isolacani-ciclici,aromatici(2-25%) - CAS: 1174921-79-9

ACGIH - STEL: 100 ppm - Notes: TWA

2-methoxy-1-methylethyl acetate - CAS: 108-65-6

EU - TWA(8h): 275 mg/m<sup>3</sup>, 50 ppm - STEL: 550 mg/m<sup>3</sup>, 100 ppm - Notes: Indicative Occupational Exposure Limit Values [2,3] and Limit Values for Occupational Exposure [4] (for references see bibliography)

o-xylene - CAS: 1330-20-7

EU - TWA(8h): 221 mg/m<sup>3</sup>, 50 ppm - STEL: 442 mg/m<sup>3</sup>, 100 ppm - Notes: Bold-type: Indicative Occupational Exposure Limit Values [2,3] and Limit Values for Occupational Exposure [4] (for references see bibliography)

ACGIH - TWA(8h): 100 ppm - STEL: 150 ppm - Notes: A4, BEI - URT and eye irr, CNS impair

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

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

naphthalene - CAS: 91-20-3

EU - TWA(8h): 50 mg/m<sup>3</sup>, 10 ppm - Notes: Indicative Occupational Exposure Limit Values, proposal [5] (for references see bibliography)

ACGIH - TWA(8h): 10 ppm - STEL: 15 ppm - Notes: Skin, (A4) - (Hematologic eff, URT and eye irr, eye dam)

ethanediol; ethylene glycol - CAS: 107-21-1

EU - TWA(8h): 52 mg/m<sup>3</sup>, 20 ppm - STEL: 104 mg/m<sup>3</sup>, 40 ppm - Notes: Bold-type: Indicative Occupational Exposure Limit Values [2,3] and Limit Values for Occupational Exposure [4] (for references see bibliography)

ACGIH - STEL: Ceiling 100 mg/m<sup>3</sup> - Notes: A4 (H) - URT and eye irr

ammonia, anhydrous - CAS: 7664-41-7

EU - TWA(8h): 14 mg/m<sup>3</sup>, 20 ppm - STEL: 36 mg/m<sup>3</sup>, 50 ppm - Notes: Bold-type: Indicative Occupational Exposure Limit Values [2,3] and Limit Values for Occupational Exposure [4] (for references see bibliography)

ACGIH - TWA(8h): 25 ppm - STEL: 35 ppm - Notes: Eye dam, URT irr

DNEL Exposure Limit Values

N.A.

PNEC Exposure Limit Values

N.A.

### 8.2. Exposure controls

Eye protection:

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.

Protection for hands:

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

Respiratory protection:

Not needed for normal use.

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

Properties	Value	Method:	Notes:
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Appearance and colour:	Liquido bianco	--	--
Odour:	caratteristico ragia minerale	--	--
Odour threshold:	N.A.	--	--
pH:	n.a.	--	--
Melting point / freezing point:	N.A.	--	--
Initial boiling point and boiling range:	N.A.	--	--
Flash point:	>37 ° C	--	--
Evaporation rate:	N.A.	--	--
Solid/gas flammability:	N.A.	--	--
Upper/lower flammability or explosive limits:	N.A.	--	--
Vapour pressure:	N.A.	--	--
Vapour density:	>1	--	--
Relative density:	1,260Kg/l	--	--
Solubility in water:	nessuna	--	--
Solubility in oil:	N.A.	--	--
Partition coefficient (n-octanol/water):	N.A.	--	--
Auto-ignition temperature:	N.A.	--	--
Decomposition temperature:	N.A.	--	--
Viscosity:	N.A.	--	--
Explosive properties:	N.A.	--	--
Oxidizing properties:	N.A.	--	--

## 9.2. Other information

Properties	Value	Method:	Notes:
Miscibility:	N.A.	--	--
Fat Solubility:	N.A.	--	--
Conductivity:	N.A.	--	--
Substance Groups relevant properties	N.A.	--	--

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

It may generate dangerous reactions (See subsections below)

### 10.2. Chemical stability

It may generate dangerous reactions (See subsections below)

### 10.3. Possibility of hazardous reactions

None

### 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 product:

N.A.

Toxicological information of the main substances found in the product:

Idrocarburi ,C9-C12,n-alcani,isolacani-ciclici,aromatici(2-25%) - CAS: 1174921-79-9

a) acute toxicity:

Test: LC50 - Route: Inhalation - Species: Rat > 13.1 mg/l - Source: OCSE 403

Test: LD50 - Route: Oral - Species: Rat > 5000 mg/kg - Source: OCSE 401

Test: LD50 - Route: Skin - Species: Rabbit > 4 ml/kg - Source: OCSE 402

c) serious eye damage/irritation:

Test: Eye Irritant - Source: OCSE 405

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

a) acute toxicity:

Test: LC50 - Route: Inhalation - Species: Rat 8000 Ppm

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

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

2-butanone oxime; ethyl methyl ketoxime; ethyl methyl ketone oxime - CAS: 96-29-7

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat 3000 mg/kg - Notes: Tossicità acuta

Test: LC50 - Route: Inhalation - Species: Rat > 4.8 mg/l - Duration: 4h

o-xylene - CAS: 1330-20-7  
LD50 (RAT) ORAL: 5000 MG/KG

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 working practices, so that the product is not released into the environment.

Idrocarburi ,C9-C12,n-alcani,isolacani-ciclici,aromatici(2-25%) - CAS: 1174921-79-9

#### a) Aquatic acute toxicity:

Endpoint: L6 - Species: Daphnia = 10-22 mg/l - Duration h: 48

Endpoint: L7 - Species: Algae = 1 mg/l - Duration h: 72

Endpoint: L6 - Species: Algae = 4.6-10 mg/l - Duration h: 72

Endpoint: L9 - Species: Daphnia = 0.097 mg/l - Duration h: 504

Endpoint: L10 - Species: Daphnia = 0.203 mg/l - Duration h: 504

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

#### a) Aquatic acute toxicity:

Endpoint: EC50 - Species: Daphnia 100 mg/l - Duration h: 48

Endpoint: EC50 - Species: Algae 1799 mg/l - Duration h: 72

Endpoint: LC50 - Species: Fish 1430 mg/l - Duration h: 96

2-butanone oxime; ethyl methyl ketoxime; ethyl methyl ketone oxime - CAS: 96-29-7

#### a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish = 48 mg/l - Duration h: 96

Endpoint: EC50 - Species: Daphnia = 750 mg/l - Duration h: 48

Endpoint: 4 - Species: Algae = 100 mg/l - Duration h: 72

### 12.2. Persistence and degradability

None

Idrocarburi ,C9-C12,n-alcani,isolacani-ciclici,aromatici(2-25%) - CAS: 1174921-79-9

Biodegradability: Not persistent and 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

## 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.

## SECTION 14: Transport information

### 14.1. UN number

ADR-UN Number: 1263

IATA-UN Number: 1263

IMDG-UN Number: 1263

### 14.2. UN proper shipping name

ADR-Shipping Name: PAINT or PAINT RELATED MATERIAL

IATA-Shipping Name: PAINT or PAINT RELATED MATERIAL

IMDG-Shipping Name: PAINT or PAINT RELATED MATERIAL

### 14.3. Transport hazard class(es)

ADR-Class: 3  
ADR - Hazard identification number: 30  
IATA-Class: 3  
IATA-Label: Flamm. Liquid  
IMDG-Class: 3

14.4. Packing group

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

14.5. Environmental hazards

IMDG-Marine pollutant: No

14.6. Special precautions for user

Rail (RID): 3.III  
ADR-S.P.: 640E  
ADR-Transport category (Tunnel restriction code): (D/E)  
IATA-Passenger Aircraft: 355  
IATA-Cargo Aircraft: 366  
IATA-ERG: 3L

IMDG-EmS: F-E , S-E

IMDG-Stowage and handling: A

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

## 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)  
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)  
Regulation (EU) n. 605/2014 (ATP 6 CLP)  
Regulation (EU) n. 2015/1221 (ATP 7 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  
Restriction 40

Restrictions related to the substances contained:

Restriction 30

Volatile CMR substances = 0.00 %

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

Organic Carbon - C = 0.00

Where applicable, refer to the following regulatory provisions :

Directive 2012/18/EU (Seveso III)  
Regulation (EC) nr 648/2004 (detergents).  
Dir. 2004/42/EC (VOC directive)

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

N.A.

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for the mixture.

## SECTION 16: Other information

Text of phrases referred to under heading 3:

H226 Flammable liquid and vapour.  
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.  
H315 Causes skin irritation.  
H312 Harmful in contact with skin.  
H332 Harmful if inhaled.



H335 May cause respiratory irritation.  
H318 Causes serious eye damage.  
H351 Suspected of causing cancer.  
H317 May cause an allergic skin reaction.  
H400 Very toxic to aquatic life.  
H319 Causes serious eye irritation.  
H361 Suspected of damaging fertility or the unborn child in contact with skin and if swallowed.  
H410 Very toxic to aquatic life with long lasting effects.  
H373 May cause damage to organs through prolonged or repeated exposure.  
H302 Harmful if swallowed.  
H221 Flammable gas.  
H280 Contains gas under pressure; may explode if heated.  
H314 Causes severe skin burns and eye damage.  
H331 Toxic if inhaled.

Hazard class and hazard category	Code	Description
Flam. Gas 2	2.2/2	Flammable gas, Category 2
Press. Gas	2.5	Gases under pressure
Flam. Liq. 3	2.6/3	Flammable liquid, Category 3
Acute Tox. 3	3.1/3/Inhal	Acute toxicity (inhalation), Category 3
Acute Tox. 4	3.1/4/Dermal	Acute toxicity (dermal), Category 4
Acute Tox. 4	3.1/4/Inhal	Acute toxicity (inhalation), Category 4
Acute Tox. 4	3.1/4/Oral	Acute toxicity (oral), Category 4
Asp. Tox. 1	3.10/1	Aspiration hazard, Category 1
Skin Corr. 1B	3.2/1B	Skin corrosion, Category 1B
Skin Irrit. 2	3.2/2	Skin irritation, Category 2
Eye Dam. 1	3.3/1	Serious eye damage, Category 1
Eye Irrit. 2	3.3/2	Eye irritation, Category 2
Skin Sens. 1,1A,1B	3.4.2/1-1A-1B	Skin Sensitisation, Category 1,1A,1B
Carc. 2	3.6/2	Carcinogenicity, Category 2
Repr. 2	3.7/2	Reproductive toxicity, Category 2
STOT SE 3	3.8/3	Specific target organ toxicity - single exposure, Category 3
STOT RE 2	3.9/2	Specific target organ toxicity - repeated exposure, Category 2
Aquatic Acute 1	4.1/A1	Acute aquatic hazard, category 1
Aquatic Chronic 1	4.1/C1	Chronic (long term) aquatic hazard, category 1
Aquatic Chronic 2	4.1/C2	Chronic (long term) aquatic hazard, category 2
Aquatic Chronic 3	4.1/C3	Chronic (long term) aquatic hazard, category 3

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

Classification according to Regulation (EC) Nr. 1272/2008	Classification procedure
Flam. Liq. 3, H226	On basis of test data
Asp. Tox. 1, H304	Calculation method
Aquatic Chronic 3, H412	Calculation method

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

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.
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.
PNEC:	Predicted No Effect Concentration.
RID:	Regulation Concerning the International Transport of Dangerous Goods by Rail.
STEL:	Short Term Exposure limit.
STOT:	Specific Target Organ Toxicity.
TLV:	Threshold Limiting Value.
TWA:	Time-weighted average
WGK:	German Water Hazard Class.