

## Safety Data Sheet

### LECHLEROID L THINNER

Safety Data Sheet dated 21/05/2024 version 5



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

### 1.1. Product identifier

Mixture identification:

Trade name: LECHLEROID L THINNER

Trade code: L0000552

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

Recommended use: Coatings and paints, thinners, paint removers

Diluyente per prodotti vernicianti

liquido

Impieghi industriali

Uses advised against: N.A.

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

Company: Lechler SpA - Via Cecilio, 17 - 22100 Como - CO - Italy

Telefono: +39031586111

First Email: safety@lechler.eu

### 1.4. Emergency telephone number

CAV "Osp.Ped.Bambino Gesù" Dip.Emergenza di Roma ...0668593726  
Azienda Ospedaliera Università di Foggia .....800183459 -  
Ospedale Niguarda Ca' Granda di Milano .....0266101029 -  
Azienda Ospedaliera "A. Cardarelli" di Napoli .....0817472870 -  
CAV Policlinico "Umberto I" di Roma .....0649978000 -  
CAV Policlinico "A. Gemelli" di Roma .....063054343 -  
Azienda Osp."Careggi" U.O. Tossicologica di Firenze .....0557947819 -  
CAV Centro Nazionale di Informaz.Tossicol. di Pavia .....038224444 -  
Azienda Ospedaliera Papa Giovanni XXIII di Bergamo.....800883300 -  
Azienda Ospedaliera Integrata di Verona..... ..800011858 -

## SECTION 2: Hazards identification



### 2.1. Classification of the substance or mixture

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

Flam. Liq. 2	Highly flammable liquid and vapour.
Skin Irrit. 2	Causes skin irritation.
Eye Dam. 1	Causes serious eye damage.
Repr. 2	Suspected of damaging fertility or the unborn child.
STOT SE 3	May cause respiratory irritation.
STOT SE 3	May cause drowsiness or dizziness.
STOT RE 2	May cause damage to organs through prolonged or repeated exposure.
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

**Regulation (EC) No 1272/2008 (CLP):**

**Hazard pictograms and Signal Word**



Danger

**Hazard statements**

H225	Highly flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H361	Suspected of damaging fertility or the unborn child.
H373	May cause damage to organs through prolonged or repeated exposure.
H412	Harmful to aquatic life with long lasting effects.

**Precautionary statements**

P202	Do not handle until all safety precautions have been read and understood.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301+P310	IN CASO DI INGESTIONE: contattare immediatamente un CENTRO ANTIVELENI/un medico.
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/doctor/...
P331	Do NOT induce vomiting.
P370+P378	In caso d'incendio: utilizzare sabbia secca, prodotto chimico secco o schiuma resistente all'alcool per estinguere.
P403+P235	Store in a well-ventilated place. Keep cool.

**Contains**

toluene  
acetone  
2-metilpropan-1-olo  
acetato di isobutile

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

None.

**2.3. Other hazards**

Risultati della valutazione PBT e vPvB  
Secondo i criteri dell'ordinamento REACH nessuna sostanza come PBT, vPvB. Proprietà di interferenza con il sistema endocrino-Tossicità  
La sostanza/miscela non contiene componenti considerati aventi proprietà di interferenza endocrina ai sensi dell'articolo 57(f) del REACH o del regolamento delegato (UE) 2017/2100 della Commissione o del regolamento (UE) 2018/605 della Commissione a livelli dello 0,1% o superiori.  
Proprietà di interferenza con il sistema endocrino-Ecotossicità  
La sostanza/miscela non contiene componenti considerati aventi proprietà di interferenza endocrina ai sensi dell'articolo 57(f) del REACH o del regolamento delegato (UE) 2017/2100 della Commissione o del regolamento (UE) 2018/605 della Commissione a livelli dello 0,1% o superiori.

Other Hazards: No other hazards

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**SECTION 3: Composition/information on ingredients**

**3.1. Substances**

N.A.

**3.2. Mixtures**

Mixture identification: LECHLEROID L THINNER

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

Qty	Name	Ident. Numb.	Classification	Registration Number
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≥40 - ≤50 % toluene	CAS:108-88-3 EC:203-625-9 Index:601-021-00-3	Flam. Liq. 2, H225; Asp. Tox. 1, H304; Repr. 2, H361d; STOT RE 2, H373; Skin Irrit. 2, H315; STOT SE 3, H336; Aquatic Chronic 3, H412	01-2119471310-51
≥25 - ≤30 % acetone	CAS:67-64-1 EC:200-662-2 Index:606-001-00-8	Flam. Liq. 2, H225; Eye Irrit. 2, H319; STOT SE 3, H336, EUH066	01-2119471330-49
≥15 - ≤20 % acetato di isobutile	CAS:110-19-0 EC:203-745-1 Index:607-026-00-7	Flam. Liq. 2, H225; STOT SE 3, H336, EUH066	01-2119488971-22
≥15 - ≤20 % 2-metilpropan-1-olo	CAS:78-83-1 EC:201-148-0 Index:603-108-00-1	Flam. Liq. 3, H226; Skin Irrit. 2, H315; Eye Dam. 1, H318; STOT SE 3, H335; STOT SE 3, H336	01-2119484609-23
≥5 - ≤7 % 4-idrossi-4-metil-pentan-2-one	CAS:123-42-2 EC:204-626-7 Index:603-016-00-1	Flam. Liq. 3, H226 Eye Irrit. 2, H319 Repr. 2, H361 STOT SE 3, H335	01-2119473975-21

Specific Concentration Limits:  
C ≥ 10%: 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.

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.

OBTAIN IMMEDIATE MEDICAL ATTENTION.

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 induce vomiting, get medical attention showing the SDS and label hazardous.

In case of Inhalation:

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

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

Eye irritation

Eye damages

Skin Irritation

Erythema

### 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).

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media:

In caso d'incendio: utilizzare sabbia secca, prodotto chimico secco o schiuma resistente all'alcool per estinguere.

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.

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## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

#### For non emergency personnel:

- 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.

#### For emergency responders:

- Wear personal protection equipment.

### 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

- Suitable material for taking up: absorbing material, organic, sand
- Wash with plenty of water.

### 6.4. Reference to other sections

- See also section 8 and 13

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## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

- Avoid contact with skin and eyes, inhalation of vapours and mists.
- Exercise the greatest care when handling or opening the container.
- 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.

#### Advice on general occupational hygiene:

### 7.2. Conditions for safe storage, including any incompatibilities

- Always keep in a well ventilated place.
- Conservare ad una temperatura compresa tra 5° e 35°C. Tenere lontano da fiamme libere e sorgenti di calore. Evitare l'esposizione diretta al sole.
- Keep away from unguarded flame, sparks, and heat sources. Avoid direct exposure to sunlight.

Incompatible materials:

- None in particular.

Instructions as regards storage premises:

- Cool and adequately ventilated.

### 7.3. Specific end use(s)

Recommendation(s)

- None in particular

Industrial sector specific solutions:

- None in particular

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## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### Community Occupational Exposure Limits (OEL)

	OEL Type	Country	Occupational Exposure Limit
toluene CAS: 108-88-3	EU		Long Term: 192 mg/m <sup>3</sup> - 50 ppm; Breve Termine 384 mg/m <sup>3</sup> - 100 ppm Behaviour Indicative 2006/15/CE
	EU		Identifica la possibilità di significativo assorbimento attraverso la pelle
	SUVA D	SWITZERLAN D	Long Term: 190 mg/m <sup>3</sup> - 50 ppm ototossicità con amplificazione del rumore

	SUVA	SWITZERLAN D	Breve Termine 760 mg/m <sup>3</sup> - 200 ppm Se il valore limite di esposizione professionale viene rispettato, le lesioni al feto sono improbabili.
	VLEP	ITALY	Long Term: 192 mg/m <sup>3</sup> - 50 ppm La notazione 'Pelle' attribuita ai valori limite di esposizione indica possibilità di assorbimento significativo attraverso la pelle
acetone CAS: 67-64-1	ACGIH		Long Term: 250 ppm; Breve Termine 500 ppm A4, BEI - URT and eye irr, CNS impair
	EU		Long Term: 1210 mg/m <sup>3</sup> - 500 ppm Behaviour Indicative 2000/39/CE
	SUVA	SWITZERLAN D	Long Term: 1200 mg/m <sup>3</sup> - 500 ppm; Breve Termine 2400 mg/m <sup>3</sup> - 1000 ppm National Institute for Occupational Safety and Health
	VLEP	ITALY	Long Term: 1210 mg/m <sup>3</sup> - 500 ppm
acetato di isobutile CAS: 110-19-0	SUVA	SWITZERLAN D	Long Term: 480 mg/m <sup>3</sup> - 100 ppm National Institute for Occupational Safety and Health
	SUVA	SWITZERLAN D	Breve Termine 960 mg/m <sup>3</sup> - 200 ppm Se il valore limite di esposizione professionale viene rispettato, le lesioni al feto sono improbabili.
	ACGIH		Long Term: 50 ppm; Breve Termine 150 ppm Eye and URT irr
	EU		Long Term: 241 mg/m <sup>3</sup> - 50 ppm; Breve Termine 723 mg/m <sup>3</sup> - 150 ppm Behaviour Indicative 2019/1831/UE
2-metilpropan-1-olo CAS: 78-83-1	SUVA	SWITZERLAN D	Long Term: 150 mg/m <sup>3</sup> - 50 ppm; Breve Termine 150 mg/m <sup>3</sup> - 50 ppm Se il valore limite di esposizione professionale viene rispettato, le lesioni al feto sono improbabili.
	ACGIH		Long Term: 50 ppm Skin and eye irr
4-idrossi-4-metil-pentan-2-one CAS: 123-42-2	SUVA	SWITZERLAN D	Breve Termine 192 mg/m <sup>3</sup> - 40 ppm Possibilità d'intossicazione per riassorbimento transcutaneo. Certe sostanze penetrano nell'organismo non soltanto tramite le vie re
	SUVA	SWITZERLAN D	Long Term: 96 mg/m <sup>3</sup> - 20 ppm National Institute for Occupational Safety and Health
	ACGIH		Long Term: 50 ppm URT and eye irr

### Biological limit values

toluene  
CAS: 108-88-3

Biological Indicator: O-Cresol; Sampling Period: Fine turno  
Value: 0.5 mg/L; Medium: Urine  
Remark: Argentina. Biological Exposure Indices

Biological Indicator: Hippuric acid; Sampling Period: Fine turno  
Value: 16 g/g creatinine; Medium: Urine  
Remark: Argentina. Biological Exposure Indices

Biological Indicator: Toluene; Sampling Period: Prior to last shift of workweek  
Value: 0.05 mg/L; Medium: Blood  
Remark: Argentina. Biological Exposure Indices

Biological Indicator: O-Cresol; Sampling Period: At the end of a work week / at the end of a work day / at the end of a shift  
Value: 0.8 mg/L; Medium: Urine  
Remark: Austria. Regulation on health surveillance in the workplace 2014

Biological Indicator: Toluene; Sampling Period: End of workday  
Value: 250 µg/L; Medium: Blood  
Remark: Austria. Regulation on health surveillance in the workplace 2014

Biological Indicator: Hippuric acid; Sampling Period: End of last day of the working day (recommended to avoid the first day of the week)  
Value: 25 g/g creatinine; Medium: Urine  
Remark: Brazil. NR7. Parameters for Biological Control of Occupational Exposure to Some Chemical Agents

Biological Indicator: Hippuric acid; Sampling Period: Fine turno

Value: 16 mmol/mmol creatinine; Medium: Urine  
Remark: Bulgaria. Biological limit values

Biological Indicator: Toluene; Sampling Period: Before shift at end of workweek  
Value: 0.05 mg/L; Medium: Blood  
Remark: Chile. Biological Limit Values

Biological Indicator: Toluene; Sampling Period: End of workday  
Value: 30 µg/L; Medium: Urine  
Remark: Chile. Biological Limit Values

Biological Indicator: Hippuric acid; Sampling Period: End of workshift (after exposure has ended)  
Value: 1 mol/mol creatinine; Medium: Urine  
Remark: China. Biological Occupational Exposure Limits for 15 chemicals.

Biological Indicator: Hippuric acid; Sampling Period: End of workshift (after exposure has ended)  
Value: 15 g/g creatinine; Medium: Urine  
Remark: China. Biological Occupational Exposure Limits for 15 chemicals.

Biological Indicator: Hippuric acid; Sampling Period: End of workshift (after exposure has ended)  
Value: 11 Millimoles per liter; Medium: Urine  
Remark: China. Biological Occupational Exposure Limits for 15 chemicals.

Biological Indicator: Hippuric acid; Sampling Period: End of workshift (after exposure has ended)  
Value: 2 g/l; Medium: Urine  
Remark: China. Biological Occupational Exposure Limits for 15 chemicals.

Biological Indicator: Toluene; Sampling Period: End of workshift (15-30 min after exposure has ended)  
Value: 20 mg/m<sup>3</sup>; Medium: Air at the end of exhalation  
Remark: China. Biological Occupational Exposure Limits for 15 chemicals.

Biological Indicator: Toluene  
Value: 5 mg/m<sup>3</sup>; Medium: Air at the end of exhalation  
Remark: China. Biological Occupational Exposure Limits for 15 chemicals.

Biological Indicator: O-Cresol; Sampling Period: Fine turno  
Value: 3 mg/g Creatinine; Medium: Urine  
Remark: Maximum allowable occupational exposure limits in the workplace - Table 3. Adopted Biological Exposu

Biological Indicator: Toluene; Sampling Period: Fine turno  
Value: 0.03 mg/L; Medium: Urine  
Remark: Maximum allowable occupational exposure limits in the workplace - Table 3. Adopted Biological Exposu

Biological Indicator: Toluene; Sampling Period: Prior to last shift of workweek  
Value: 0.02 mg/L; Medium: Blood  
Remark: Maximum allowable occupational exposure limits in the workplace - Table 3. Adopted Biological Exposu

Biological Indicator: Toluene; Sampling Period: Fine turno  
Value: 1085 micromol per litre; Medium: Blood  
Remark: Croatia. Biological Exposure Limits

Biological Indicator: Toluene; Sampling Period: Fine turno  
Value: 1 mg/L; Medium: Blood  
Remark: Croatia. Biological Exposure Limits

Biological Indicator: Toluene; Sampling Period: during exposure  
Value: 83 micromol per litre; Medium: Air at the end of exhalation  
Remark: Croatia. Biological Exposure Limits

Biological Indicator: Toluene; Sampling Period: during exposure  
Value: 20 ppm; Medium: Air at the end of exhalation  
Remark: Croatia. Biological Exposure Limits

Biological Indicator: Hippuric acid; Sampling Period: Fine turno  
Value: 158 mol/mol creatinine; Medium: Urine  
Remark: Croatia. Biological Exposure Limits

Biological Indicator: Hippuric acid; Sampling Period: Fine turno  
Value: 25 g/g creatinine; Medium: Urine  
Remark: Croatia. Biological Exposure Limits

Biological Indicator: O-Cresol; Sampling Period: Fine turno  
Value: 105 Millimoles per mole Creatinine; Medium: Urine  
Remark: Croatia. Biological Exposure Limits

Biological Indicator: O-Cresol; Sampling Period: Fine turno  
Value: 1 mg/g Creatinine; Medium: Urine

Remark: Croatia. Biological Exposure Limits

Biological Indicator: Hippuric acid; Sampling Period: Fine turno  
Value: 1600 mg/g Creatinine; Medium: Urine  
Remark: Czech Republic. Biological Exposure Indices

Biological Indicator: Hippuric acid; Sampling Period: Fine turno  
Value: 1000 micromoles per millimole creatinine; Medium: Urine  
Remark: Czech Republic. Biological Exposure Indices

Biological Indicator: O-Cresol; Sampling Period: Fine turno  
Value: 15 mg/g Creatinine; Medium: Urine  
Remark: Czech Republic. Biological Exposure Indices

Biological Indicator: O-Cresol; Sampling Period: Fine turno  
Value: 16 micromoles per millimole creatinine; Medium: Urine  
Remark: Czech Republic. Biological Exposure Indices

Biological Indicator: Toluene; Sampling Period: Morning after working day  
Value: 500 mg/L; Medium: Blood  
Remark: Finland. Biological limit values

Biological Indicator: Toluene; Sampling Period: Fine turno  
Value: 600 µg/L; Medium: Blood  
Remark: TRGS 903 - Biological limit values

Biological Indicator: O-Cresol; Sampling Period: In case of long-term exposure: after more than one shift  
Value: 1.5 mg/L; Medium: Urine  
Remark: TRGS 903 - Biological limit values

Biological Indicator: O-Cresol; Sampling Period: After shift  
Value: 1 mg/g Creatinine; Medium: Urine  
Remark: Hungary. Permissible limit values of biological exposure (effect) indices

Biological Indicator: O-Cresol; Sampling Period: After shift  
Value: 105 micromoles per millimole creatinine; Medium: Urine  
Remark: Hungary. Permissible limit values of biological exposure (effect) indices

Biological Indicator: Hippuric acid  
Value: 16 g/g creatinine; Medium: Urine  
Remark: Israel. Safety at Work Regulations - Annex III Biological Exposure Indices

Biological Indicator: Toluene; Sampling Period: Within 2 h prior to end of shift at end of work week  
Value: 0.6 mg/L; Medium: Blood  
Remark: Occupational exposure limits based on biological monitoring (JSOH).

Biological Indicator: Toluene; Sampling Period: Within 2 h prior to end of shift at end of work week  
Value: 0.06 mg/L; Medium: Urine  
Remark: Occupational exposure limits based on biological monitoring (JSOH).

Biological Indicator: Hippuric acid; Sampling Period: Fine turno  
Value: 25 g/g creatinine; Medium: Urine  
Remark: Kenya. Occupational Safety and Health Act (CAP.514), Schedule I, Table 3 Biological Exposure Limits

Biological Indicator: Toluene; Sampling Period: Fine turno  
Value: 1 mg/L; Medium: venous blood  
Remark: Kenya. Occupational Safety and Health Act (CAP.514), Schedule I, Table 3 Biological Exposure Limits

Biological Indicator: O-Cresol; Sampling Period: Fine turno  
Value: 1 mg/g Creatinine; Medium: Urine  
Remark: Kenya. Occupational Safety and Health Act (CAP.514), Schedule I, Table 3 Biological Exposure Limits

Biological Indicator: Hippuric acid; Sampling Period: Fine turno  
Value: 16 g/g creatinine; Medium: Urine  
Remark: Latvia. Biological Exposure Indices

Biological Indicator: Toluene; Sampling Period: Fine turno  
Value: 0.05 mg/L; Medium: Blood  
Remark: Latvia. Biological Exposure Indices

Biological Indicator: O-Cresol; Sampling Period: Fine turno  
Value: 0.5 mg/L; Medium: Urine  
Remark: Official Mexican Norm NOM-047-SSA1-2011, Environmental Health - Biological exposure indices for work

Biological Indicator: Hippuric acid; Sampling Period: Fine turno  
Value: 16 g/g creatinine; Medium: Urine

Remark: Official Mexican Norm NOM-047-SSA1-2011, Environmental Health - Biological exposure indices for work

Biological Indicator: Toluene; Sampling Period: Prima dell'ultimo turno della settimana lavorativa  
Value: 0.05 mg/L; Medium: Blood

Remark: Official Mexican Norm NOM-047-SSA1-2011, Environmental Health - Biological exposure indices for work

Biological Indicator: Toluene; Sampling Period: Fine turno  
Value: 0.03 mg/L; Medium: Urine

Remark: New Zealand. Biological Exposure Indices

Biological Indicator: O-Cresol; Sampling Period: Fine turno  
Value: 3 mg/g Creatinine; Medium: Urine

Remark: New Zealand. Biological Exposure Indices

Biological Indicator: Toluene; Sampling Period: Before shift at end of workweek  
Value: 0.02 mg/L; Medium: Blood

Remark: Portuguese Norm 1796 - Biological Exposure Indices

Biological Indicator: Toluene; Sampling Period: Fine turno  
Value: 0.03 mg/L; Medium: Urine

Remark: Portuguese Norm 1796 - Biological Exposure Indices

Biological Indicator: O-Cresol; Sampling Period: Fine turno  
Value: 3 mg/g Creatinine; Medium: Urine

Remark: Portuguese Norm 1796 - Biological Exposure Indices

Biological Indicator: Hippuric acid; Sampling Period: Fine turno  
Value: 2 g/l; Medium: Urine

Remark: Romania. Biological limit values

Biological Indicator: O-Cresol; Sampling Period: Fine turno  
Value: 3 mg/L; Medium: Urine

Remark: Romania. Biological limit values

Biological Indicator: Toluene; Sampling Period: Prior to last shift of workweek  
Value: 0.05 mg/L; Medium: Blood

Remark: Singapore. Biological Threshold Limit Values

Biological Indicator: Toluene; Sampling Period: Fine turno  
Value: 600 µg/L; Medium: Blood

Remark: Slovakia. Biological Limit Values

Biological Indicator: Toluene; Sampling Period: Fine turno  
Value: 6517 micromol per litre; Medium: Blood

Remark: Slovakia. Biological Limit Values

Biological Indicator: Hippuric acid; Sampling Period: Fine turno  
Value: 2401 mg/L; Medium: Urine

Remark: Slovakia. Biological Limit Values

Biological Indicator: Hippuric acid; Sampling Period: Fine turno  
Value: 13399 micromol per litre; Medium: Urine

Remark: Slovakia. Biological Limit Values

Biological Indicator: Hippuric acid; Sampling Period: Fine turno  
Value: 1600 mg/g Creatinine; Medium: Urine

Remark: Slovakia. Biological Limit Values

Biological Indicator: Hippuric acid; Sampling Period: Fine turno  
Value: 1010 micromoles per millimole creatinine; Medium: Urine

Remark: Slovakia. Biological Limit Values

Biological Indicator: O-Cresol; Sampling Period: Fine turno  
Value: 143 micromol per litre; Medium: Urine

Remark: Slovakia. Biological Limit Values

Biological Indicator: O-Cresol; Sampling Period: In case of long-term exposure: after more than one shift  
Value: 103 mg/g Creatinine; Medium: Urine

Remark: Slovakia. Biological Limit Values

Biological Indicator: O-Cresol; Sampling Period: Fine turno  
Value: 108 micromoles per millimole creatinine; Medium: Urine

Remark: Slovakia. Biological Limit Values

Biological Indicator: O-Cresol; Sampling Period: In case of long-term exposure: after more than one shift  
Value: 1.5 mg/L; Medium: Urine

Remark: Slovakia. Biological Limit Values



Biological Indicator: Toluene; Sampling Period: Fine turno  
Value: 600 micromol per litre; Medium: Blood  
Remark: Slovenia. BAT-values

Biological Indicator: O-Cresol; Sampling Period: during long-term exposure: at the end of the work shift after several consecutive workdays  
Value: 1.5 mg/L; Medium: Urine  
Remark: Slovenia. BAT-values

Biological Indicator: Hippuric acid; Sampling Period: Fine turno  
Value: 25 g/g creatinine; Medium: Urine  
Remark: South Africa. Hazardous Chemical Substances Regulations, Biological Exposure Indices.

Biological Indicator: Toluene; Sampling Period: Fine turno  
Value: 1 mg/L; Medium: venous blood  
Remark: South Africa. Hazardous Chemical Substances Regulations, Biological Exposure Indices.

Biological Indicator: O-Cresol; Sampling Period: Fine turno  
Value: 1 mg/g Creatinine; Medium: Urine  
Remark: South Africa. Hazardous Chemical Substances Regulations, Biological Exposure Indices.

Biological Indicator: Toluene; Sampling Period: End of workday  
Value: 0.08 mg/L; Medium: Urine  
Remark: Occupational Exposure Limits for Chemical Agents in Spain - Biological Exposure Values

Biological Indicator: O-Cresol; Sampling Period: End of workday  
Value: 6 mg/g Creatinine; Medium: Urine  
Remark: Occupational Exposure Limits for Chemical Agents in Spain - Biological Exposure Values

Biological Indicator: Toluene; Sampling Period: prior to last shift of workweek  
Value: 0.05 mg/L; Medium: Blood  
Remark: Occupational Exposure Limits for Chemical Agents in Spain - Biological Exposure Values

Biological Indicator: Hippuric acid; Sampling Period: In case of long-term exposure: after more than one shift  
Value: 2 g/g creatinine; Medium: Urine  
Remark: Svizzera. Lista di valori BAT

Biological Indicator: O-Cresol; Sampling Period: In case of long-term exposure: after more than one shift  
Value: 0.5 mg/L; Medium: Urine  
Remark: Svizzera. Lista di valori BAT

Biological Indicator: toluol; Sampling Period: Immediately after exposure or after working hours  
Value: 648 micromol per litre; Medium: Blood  
Remark: Svizzera. Lista di valori BAT

Biological Indicator: Hippuric acid; Sampling Period: In case of long-term exposure: after more than one shift  
Value: 126 mmol/mmol creatinine; Medium: Urine  
Remark: Svizzera. Lista di valori BAT

Biological Indicator: O-Cresol; Sampling Period: In case of long-term exposure: after more than one shift  
Value: 462 micromol per litre; Medium: Urine  
Remark: Svizzera. Lista di valori BAT

Biological Indicator: toluol; Sampling Period: Immediately after exposure or after working hours  
Value: 600 µg/L; Medium: Blood  
Remark: Svizzera. Lista di valori BAT

Biological Indicator: Hippuric acid; Sampling Period: End of workday  
Value: 16 g/g creatinine; Medium: Urine  
Remark: Uruguay. Health surveillance of workers - Biological Exposure Indices (BEI).

Biological Indicator: O-Cresol; Sampling Period: End of workday  
Value: 0.5 mg/L; Medium: Urine  
Remark: Uruguay. Health surveillance of workers - Biological Exposure Indices (BEI).

Biological Indicator: Toluene; Sampling Period: Prior to last shift of workweek  
Value: 0.02 mg/L; Medium: Blood  
Remark: ACGIH - Indicatori di Esposizione Biologica (BEI)

Biological Indicator: Toluene; Sampling Period: Fine turno  
Value: 0.03 mg/L; Medium: Urine  
Remark: ACGIH - Indicatori di Esposizione Biologica (BEI)

Biological Indicator: O-Cresol; Sampling Period: Fine turno  
Value: 3 mg/g Creatinine; Medium: Urine  
Remark: ACGIH - Indicatori di Esposizione Biologica (BEI)

Biological Indicator: O-Cresol; Sampling Period: End of workday

Value: 0.5 mg/L; Medium: Urine  
Remark: VE.Biological Exposure Limits

Biological Indicator: Hippuric acid; Sampling Period: End of workday  
Value: 16 g/g creatinine; Medium: Urine  
Remark: VE.Biological Exposure Limits

Biological Indicator: Toluene; Sampling Period: Prior to last workday of workweek  
Value: 0.05 mg/L; Medium: Blood  
Remark: VE.Biological Exposure Limits

acetone  
CAS: 67-64-1

Biological Indicator: Acetone; Sampling Period: Fine turno  
Value: 50 mg/L; Medium: Urine  
Remark: Argentina. Biological Exposure Indices

Biological Indicator: Acetone; Sampling Period: Fine turno  
Value: 80 mg/L; Medium: Urine  
Remark: Bulgaria. Biological limit values

Biological Indicator: Acetone; Sampling Period: FSL  
Value: 30000 µg/g; Medium: Urine  
Remark: Chile. Biological Limit Values

Biological Indicator: Acetone; Sampling Period: Fine turno  
Value: 25 mg/L; Medium: Urine  
Remark: Maximum allowable occupational exposure limits in the workplace - Table 3. Adopted Biological Exposu

Biological Indicator: Acetone; Sampling Period: Fine turno  
Value: 34 Millimoles per liter; Medium: Blood  
Remark: Croatia. Biological Exposure Limits

Biological Indicator: Acetone; Sampling Period: Fine turno  
Value: 20 mg/L; Medium: Blood  
Remark: Croatia. Biological Exposure Limits

Biological Indicator: Acetone; Sampling Period: Fine turno  
Value: 39 Millimoles per mole Creatinine; Medium: Urine  
Remark: Croatia. Biological Exposure Limits

Biological Indicator: Acetone; Sampling Period: Fine turno  
Value: 20 mg/g Creatinine; Medium: Urine  
Remark: Croatia. Biological Exposure Limits

Biological Indicator: Acetone; Sampling Period: Immediately after exposure or after working hours  
Value: 80 mg/L; Medium: Urine  
Remark: TRGS 903 - Biological limit values

Biological Indicator: Acetone; Sampling Period: Within 2 h prior to end of shift  
Value: 40 mg/L; Medium: Urine  
Remark: Occupational exposure limits based on biological monitoring (JSOH).

Biological Indicator: Acetone; Sampling Period: Fine turno  
Value: 50 mg/L; Medium: Urine  
Remark: Official Mexican Norm NOM-047-SSA1-2011, Environmental Health - Biological exposure indices for work

Biological Indicator: Acetone; Sampling Period: Fine turno  
Value: 50 mg/L; Medium: Urine  
Remark: Portuguese Norm 1796 - Biological Exposure Indices

Biological Indicator: Acetone; Sampling Period: Fine turno  
Value: 50 mg/L; Medium: Urine  
Remark: Romania. Biological limit values

Biological Indicator: Acetone; Sampling Period: Fine turno  
Value: 80 mg/L; Medium: Urine  
Remark: Slovakia. Biological Limit Values

Biological Indicator: Acetone; Sampling Period: Fine turno  
Value: 1378 micromol per litre; Medium: Urine  
Remark: Slovakia. Biological Limit Values

Biological Indicator: Acetone; Sampling Period: Fine turno  
Value: 5336 mg/g Creatinine; Medium: Urine  
Remark: Slovakia. Biological Limit Values

Biological Indicator: Acetone; Sampling Period: Fine turno  
Value: 1039 micromoles per millimole creatinine; Medium: Urine

Remark: Slovakia. Biological Limit Values

Biological Indicator: Acetone; Sampling Period: Fine turno  
Value: 80 mg/L; Medium: Urine  
Remark: Slovenia. BAT-values

Biological Indicator: Acetone; Sampling Period: Fine turno  
Value: 100 mg/L; Medium: Urine  
Remark: South Africa. Hazardous Chemical Substances Regulations, Biological Exposure Indices.

Biological Indicator: Acetone; Sampling Period: End of workday  
Value: 50 mg/L; Medium: Urine  
Remark: Occupational Exposure Limits for Chemical Agents in Spain - Biological Exposure Values

Biological Indicator: Acetone; Sampling Period: Immediately after exposure or after working hours  
Value: 138 Millimoles per liter; Medium: Urine  
Remark: Svizzera. Lista di valori BAT

Biological Indicator: Acetone; Sampling Period: Immediately after exposure or after working hours  
Value: 80 mg/L; Medium: Urine  
Remark: Svizzera. Lista di valori BAT

Biological Indicator: Acetone; Sampling Period: Fine turno  
Value: 25 mg/L; Medium: Urine  
Remark: ACGIH - Indicatori di Esposizione Biologica (BEI)

Biological Indicator: Acetone; Sampling Period: End of workday  
Value: 50 mg/L; Medium: Urine  
Remark: VE.Biological Exposure Limits

Sampling Period: Fine turno

#### **Predicted No Effect Concentration (PNEC) values**

toluene  
CAS: 108-88-3

Exposure Route: Fresh Water; PNEC Limit: 0.68 mg/l

Exposure Route: Marine water; PNEC Limit: 0.68 mg/l

Exposure Route: Freshwater sediments; PNEC Limit: 16.39 mg/kg

Exposure Route: Marine water sediments; PNEC Limit: 16.39 mg/kg

Exposure Route: Soil; PNEC Limit: 2.89 mg/kg

Exposure Route: Intermittent releases (fresh water); PNEC Limit: 0.68 mg/l

Exposure Route: Microorganisms in sewage treatments; PNEC Limit: 13.61 mg/l

Exposure Route: Fresh Water; PNEC Limit: 10.6 mg/l

acetone  
CAS: 67-64-1

Exposure Route: Intermittent releases (fresh water); PNEC Limit: 21 mg/l

Exposure Route: Marine water; PNEC Limit: 1.06 mg/l

Exposure Route: Freshwater sediments; PNEC Limit: 30.4 mg/kg

Exposure Route: Marine water sediments; PNEC Limit: 3.04 mg/kg

Exposure Route: Soil; PNEC Limit: 29.5 mg/kg

Exposure Route: Microorganisms in sewage treatments; PNEC Limit: 100 mg/l

4-idrossi-4-metil-pentan-  
2-one  
CAS: 123-42-2

Exposure Route: Fresh Water; PNEC Limit: 2 mg/l

Exposure Route: Intermittent releases (fresh water); PNEC Limit: 1 mg/l

Exposure Route: Marine water; PNEC Limit: 0.2 mg/l

Exposure Route: Freshwater sediments; PNEC Limit: 9.06 mg/kg

Exposure Route: Marine water sediments; PNEC Limit: 0.91 mg/kg

Exposure Route: Soil; PNEC Limit: 0.63 mg/kg

Exposure Route: Microorganisms in sewage treatments; PNEC Limit: 82 mg/l

#### **Derived No Effect Level (DNEL) values**

toluene  
CAS: 108-88-3

Exposure Route: Human Inhalation; Exposure Frequency: Short Term (acute)  
Consumer: 226 mg/m<sup>3</sup>

Exposure Route: Human Inhalation; Exposure Frequency: Short Term, systemic effects  
Consumer: 226 mg/m<sup>3</sup>

Exposure Route: Human Inhalation; Exposure Frequency: Long Term, systemic effects  
Consumer: 56.5 mg/m<sup>3</sup>

Exposure Route: Human Oral; Exposure Frequency: Long Term, systemic effects  
Consumer: 8.13 mg/kg

Exposure Route: Human Dermal; Exposure Frequency: Long Term, systemic effects  
Consumer: 226 mg/kg

Exposure Route: Human Inhalation; Exposure Frequency: Short Term (acute)  
Worker Professional: 384 mg/m<sup>3</sup>

Exposure Route: Human Inhalation; Exposure Frequency: Short Term, systemic effects  
Worker Professional: 384 mg/m<sup>3</sup>

Exposure Route: Human Inhalation; Exposure Frequency: Long Term, local effects  
Worker Professional: 192 mg/m<sup>3</sup>

Exposure Route: Human Inhalation; Exposure Frequency: Long Term, systemic effects  
Worker Professional: 192 mg/m<sup>3</sup>

Exposure Route: Human Dermal; Exposure Frequency: Long Term, systemic effects  
Worker Professional: 384 mg/kg

acetone  
CAS: 67-64-1

Exposure Route: Oral; Exposure Frequency: Long Term, systemic effects  
Consumer: 62 mg/kg

Exposure Route: Human Dermal; Exposure Frequency: Long Term, systemic effects  
Consumer: 62 mg/kg

Exposure Route: Human Inhalation; Exposure Frequency: Long Term, systemic effects  
Consumer: 200 mg/m<sup>3</sup>

Exposure Route: Human Inhalation; Exposure Frequency: Short Term (acute)  
Worker Professional: 2420 mg/m<sup>3</sup>

Exposure Route: Human Dermal; Exposure Frequency: Long Term, systemic effects  
Worker Professional: 186 mg/kg

Exposure Route: Human Inhalation; Exposure Frequency: Long Term, systemic effects  
Worker Professional: 1210 mg/m<sup>3</sup>

4-idrossi-4-metil-pentan-  
2-one  
CAS: 123-42-2

Exposure Route: Human Dermal; Exposure Frequency: Long Term, systemic effects  
Consumer: 3.4 mg/kg

Exposure Route: Human Inhalation; Exposure Frequency: Long Term, systemic effects  
Consumer: 11.8 mg/m<sup>3</sup>

Exposure Route: Oral; Exposure Frequency: Long Term, systemic effects  
Consumer: 3.4 mg/kg

Exposure Route: Human Dermal; Exposure Frequency: Long Term, systemic effects  
Worker Professional: 9.4 mg/kg

Exposure Route: Human Inhalation; Exposure Frequency: Long Term, systemic effects  
Worker Professional: 66.4 mg/m<sup>3</sup>

## 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:

Use adequate protective respiratory equipment.

Thermal Hazards:

N.A.

Environmental exposure controls:

N.A.

Hygienic and Technical measures

N.A.

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## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state: Liquid

Colour: colourless  
Odour: N.A.  
pH: Not Relevant  
Kinematic viscosity:  $\leq 20,5$  mm<sup>2</sup>/sec (40 °C)  
Melting point/freezing point: N.A.  
Boiling point or initial boiling point and boiling range: N.A.  
Flash point:  $< 23^{\circ}\text{C}$   
Lower and upper explosion limit: N.A.  
Relative vapour density: N.A.  
Vapour pressure: N.A.  
Density and/or relative density: 0.84 g/cm<sup>3</sup>  
Solubility in water: N.A.  
Solubility in oil: N.A.  
Partition coefficient n-octanol/water (log value): N.A.  
Auto-ignition temperature: N.A.  
Decomposition temperature: N.A.  
Flammability: The product is classified Flam. Liq. 2 H225  
Kinematic viscosity m<sup>2</sup>/s (40°C)  $\leq 20,5$  mm<sup>2</sup>/sec (40 °C)  
Viscosity:

**Particle characteristics:**

Particle size: N.A.

**9.2. Other information**

Evaporation rate: N.A.  
Miscibility: N.A.  
Conductivity: N.A.  
No other relevant information

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**SECTION 10: Stability and reactivity**

**10.1. Reactivity**

Stable under normal conditions

**10.2. Chemical stability**

Data not available.

**10.3. Possibility of hazardous reactions**

None.

**10.4. Conditions to avoid**

Stable under normal conditions.

**10.5. Incompatible materials**

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

**10.6. Hazardous decomposition products**

None.

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**SECTION 11: Toxicological information**

**11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008**

**Toxicological Information of the Preparation**

a) acute toxicity	Not classified Based on available data, the classification criteria are not met
b) skin corrosion/irritation	The product is classified: Skin Irrit. 2(H315)
c) serious eye damage/irritation	The product is classified: Eye Dam. 1(H318)
d) respiratory or skin sensitisation	Not classified Based on available data, the classification criteria are not met
e) germ cell mutagenicity	Not classified Based on available data, the classification criteria are not met
f) carcinogenicity	Not classified Based on available data, the classification criteria are not met
g) reproductive toxicity	The product is classified: Repr. 2(H361)
h) STOT-single exposure	The product is classified: STOT SE 3(H335), STOT SE 3(H336)
i) STOT-repeated exposure	The product is classified: STOT RE 2(H373)
j) aspiration hazard	The product is classified: Asp. Tox. 1(H304)

**Toxicological information on main components of the mixture:**

toluene	a) acute toxicity	LD50 Oral Ratto = 5000 mg/kg LC50 Inhalation Ratto = 25.7 mg/l 4h LD50 Skin Coniglio = 12267 mg/kg
acetone	a) acute toxicity	LD50 Oral Ratto = 5800 mg/kg LC50 Inhalation Ratto = 76 mg/l 4h LD50 Skin Coniglio > 15800 mg/kg
4-idrossi-4-metil-pentan-2-one	a) acute toxicity	LD50 Oral Ratto = 3002 mg/kg  LC0 Inhalation Ratto >= 7.6 mg/l 4h LD50 Skin Ratto > 1875 mg/kg

## 11.2. Information on other hazards

### Endocrine disrupting properties:

La sostanza/miscela non contiene componenti considerati aventi proprietà di interferenza endocrina ai sensi dell'articolo 57(f) del REACH o del regolamento delegato (UE) 2017/2100 della Commissione o del regolamento (UE) 2018/605 della Commissione a livelli dello 0,1% o superiori.

## SECTION 12: Ecological information

### 12.1. Toxicity

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

Eco-Toxicological Information:

Harmful to aquatic life with long lasting effects.

#### List of Eco-Toxicological properties of the product

The product is classified: Aquatic Chronic 3(H412)

#### List of Eco-Toxicological properties of the components

Component	Ident. Numb.	Ecotox Data
toluene	CAS: 108-88-3 - EINECS: 203- 625-9 - INDEX: 601-021-00-3	a) Tossicità acquatica acuta : LC50 Fish Oncorhynchus kisutch (coho salmon) = 5.5 mg/L 96 H  a) Tossicità acquatica acuta : EC50 Invertebrates Ceriodaphnia dubia (water flea) = 3.78 mg/L 48 H  e) Tossicità per le piante : EC50 Algae algae = 134 mg/L 96 H b) Tossicità acquatica cronica : NOEC Fish Oncorhynchus kisutch (coho salmon) = 1.39 mg/L 40 D
acetone	CAS: 67-64-1 - EINECS: 200- 662-2 - INDEX: 606-001-00-8	a) Tossicità acquatica acuta : LC50 Fish Pimephales promelas (fathead minnow) = 8120 mg/L 96 H  a) Tossicità acquatica acuta : EC50 Invertebrates Daphnia (water flea) = 8800 mg/L 48 H  e) Tossicità per le piante : NOEC Algae algae = 530 mg/L 8 D
4-idrossi-4-metil-pentan-2-one	CAS: 123-42-2 - EINECS: 204- 626-7 - INDEX: 603-016-00-1	a) Tossicità acquatica acuta : LC50 Fish Oryzias latipes (Orange-red killifish) > 100 mg/L 96 H  a) Tossicità acquatica acuta : EC50 Invertebrates Daphnia magna (Water flea) > 1000 mg/L 48 H  e) Tossicità per le piante : EC50 Algae Pseudokirchneriella subcapitata (green algae) < 1000 mg/L 72 H

### 12.2. Persistence and degradability

N.A.

### 12.3. Bioaccumulative potential

N.A.

#### 12.4. Mobility in soil

N.A.

#### 12.5. Results of PBT and vPvB assessment

No PBT or vPvB substances present in concentration  $\geq 0.1\%$

#### 12.6. Endocrine disrupting properties

La sostanza/miscela non contiene componenti considerati aventi proprietà di interferenza endocrina ai sensi dell'articolo 57(f) del REACH o del regolamento delegato (UE) 2017/2100 della Commissione o del regolamento (UE) 2018/605 della Commissione a livelli dello 0,1% o superiori.

#### 12.7. Other adverse effects

N.A.

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### 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.

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### SECTION 14: Transport information

#### 14.1. UN number or ID number

1263

#### 14.2. UN proper shipping name

ADR-Shipping Name: PAINT RELATED MATERIAL

IATA-Technical name: PAINT RELATED MATERIAL

IMDG-Technical name: PAINT RELATED MATERIAL

#### 14.3. Transport hazard class(es)

ADR-Class: 3

IATA-Class: 3

IMDG-Class: 3

#### 14.4. Packing group

ADR-Packing Group: II

IATA-Packing group: II

IMDG-Packing group: II

#### 14.5. Environmental hazards

Toxic ingredients quantity: 0.00

Very toxic ingredients quantity: 0.00

Marine pollutant: No

Environmental Pollutant: No

IMDG-EMS: F-E, S-E

#### 14.6. Special precautions for user

Road and Rail (ADR-RID):

ADR exempt:

ADR-Label: 3

ADR - Hazard identification number: 33

ADR-Special Provisions: 163 367 640C 650

ADR-Transport category (Tunnel restriction code): 2 (D/E)

Air (IATA):

IATA-Passenger Aircraft: 353

IATA-Cargo Aircraft: 364

IATA-Label: 3

IATA-Subsidiary hazards: -

IATA-Erg: 3L

IATA-Special Provisions: A3 A72 A192

Sea (IMDG):

IMDG-Stowage Code: Category B

IMDG-Stowage Note: -

IMDG-Subsidiary hazards: -

IMDG-Special Provisions: 163 367

#### 14.7. Maritime transport in bulk according to IMO instruments

N.A.

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### 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) 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)

Regulation (EU) n. 2016/918 (ATP 8 CLP)

Regulation (EU) n. 2016/1179 (ATP 9 CLP)

Regulation (EU) n. 2017/776 (ATP 10 CLP)

Regulation (EU) n. 2018/669 (ATP 11 CLP)

Regulation (EU) n. 2018/1480 (ATP 13 CLP)

Regulation (EU) n. 2019/521 (ATP 12 CLP)

Regulation (EU) n. 2020/217 (ATP 14 CLP)

Regulation (EU) n. 2020/1182 (ATP 15 CLP)

Regulation (EU) n. 2021/643 (ATP 16 CLP)

Regolamento (UE) n. 2021/849 (ATP 17 CLP)

Regolamento (UE) n. 2022/692 (ATP 18 CLP)

Regulation (EU) n. 2020/878

#### 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: 3, 40

Restrictions related to the substances contained: 48, 75

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

**Seveso III category according to Annex 1, part 1**

Lower-tier threshold (tonnes)	Upper-tier threshold (tonnes)
Product belongs to category: P5c 5000	50000

#### Explosives precursors – Regulation 2019/1148

This product is regulated by Regulation (EU) 2019/1148: all suspicious transactions, and significant disappearances and thefts should be reported to the relevant national contact point

Substance(s) listed in regulation 2019/1148:

>=25 - <=30 % acetone	67-64-1	Annex II
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#### Regulation (EU) No 649/2012 (PIC regulation)

No substances listed

#### German Water Hazard Class.

2: significativamente inquinante per le acque

#### Lagerklasse according to TRGS 510:

LGK 3

#### SVHC Substances:

NOSVHCCOMPS

#### Dir. 2010/75/CE (Direttiva COV)

Volatile Organic compounds - VOCs = 100.00 %

Volatile Organic compounds - VOCs = 841.00 g/L

Estimated Total Content of Water 0.00 %

Estimated Total Solid Content 0.00 %

#### Classificazione in accordo con VbF

Classificazione in accordo con VbF A I - Punto di infiammabilità inferiore a 21 °C, non mescolabile in acqua a 15 °C



**Mal-Code (Denmark)**

Mal-Code (Denmark)	Mal Factor	Unit of Measure	Revision Status / Number	Regulatory Base
5 - 3	4.095	m3 air/10 g	1993	Administrative determined MAL-Factors

**Biocidi**

REGOLAMENTO (CE) N. 528/2012

**15.2. Chemical safety assessment**

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

**SECTION 16: Other information**

Code	Description
EUH066	Repeated exposure may cause skin dryness or cracking.
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H361	Suspected of damaging fertility or the unborn child.
H361d	Suspected of damaging the unborn child.
H373	May cause damage to organs through prolonged or repeated exposure.
H412	Harmful to aquatic life with long lasting effects.

Code	Hazard class and hazard category	Description
2.6/2	Flam. Liq. 2	Flammable liquid, Category 2
2.6/3	Flam. Liq. 3	Flammable liquid, Category 3
3.10/1	Asp. Tox. 1	Aspiration hazard, Category 1
3.2/2	Skin Irrit. 2	Skin irritation, Category 2
3.3/1	Eye Dam. 1	Serious eye damage, Category 1
3.3/2	Eye Irrit. 2	Eye irritation, Category 2
3.7/2	Repr. 2	Reproductive toxicity, Category 2
3.8/3	STOT SE 3	Specific target organ toxicity — single exposure, Category 3
3.9/2	STOT RE 2	Specific target organ toxicity — repeated exposure, Category 2
4.1/C3	Aquatic Chronic 3	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. 2, H225	On basis of test data
Skin Irrit. 2, H315	Calculation method
Eye Dam. 1, H318	Calculation method
Repr. 2, H361	Calculation method
STOT SE 3, H335	Calculation method
STOT SE 3, H336	Calculation method
STOT RE 2, H373	Calculation method
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.

Legend to abbreviations and acronyms used in the safety data sheet:

ACGIH: American Conference of Governmental Industrial Hygienists  
ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.  
AND: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways  
ATE: Acute Toxicity Estimate  
ATEmix: Acute toxicity Estimate (Mixtures)  
BCF: Biological Concentration Factor  
BEI: Biological Exposure Index  
BOD: Biochemical Oxygen Demand  
CAS: Chemical Abstracts Service (division of the American Chemical Society).  
CAV: Poison Center  
CE: European Community  
CLP: Classification, Labeling, Packaging.  
CMR: Carcinogenic, Mutagenic and Reprotoxic  
COD: Chemical Oxygen Demand  
COV: Volatile Organic Compound  
CSA: Chemical Safety Assessment  
CSR: Chemical Safety Report  
DMEL: Derived Minimal Effect Level  
DNEL: Derived No Effect Level.  
DPD: Dangerous Preparations Directive  
DSD: Dangerous Substances Directive  
EC50: Half Maximal Effective Concentration  
ECHA: European Chemicals Agency  
EINECS: European Inventory of Existing Commercial Chemical Substances.  
ES: Exposure Scenario  
GefStoffVO: Ordinance on Hazardous Substances, Germany.  
GHS: Globally Harmonized System of Classification and Labeling of Chemicals.  
IARC: International Agency for Research on Cancer  
IATA: International Air Transport Association.  
IATA-DGR: Dangerous Goods Regulation by the "International Air Transport Association" (IATA).  
IC50: half maximal inhibitory concentration  
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.  
IRCCS: Scientific Institute for Research, Hospitalization and Health Care  
KAFH: KAFH  
KSt: Explosion coefficient.  
LC50: Lethal concentration, for 50 percent of test population.  
LD50: Lethal dose, for 50 percent of test population.  
LDLo: Leathal Dose Low  
N.A.: Not Applicable  
N/A: Not Applicable  
N/D: Not defined/ Not available  
NA: Not available  
NIOSH: National Institute for Occupational Safety and Health  
NOAEL: No Observed Adverse Effect Level  
OSHA: Occupational Safety and Health Administration  
PBT: Persistent, Bioaccumulative and Toxic  
PGK: Packaging Instruction  
PNEC: Predicted No Effect Concentration.  
PSG: Passengers  
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.  
TWATLV: Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard).  
vPvB: Very Persistent, Very Bioaccumulative.  
WGK: German Water Hazard Class.

**Paragraphs modified from the previous revision:**

- SECTION 2: Hazards identification
- SECTION 3: Composition/information on ingredients
- SECTION 7: Handling and storage
- SECTION 8: Exposure controls/personal protection
- SECTION 9: Physical and chemical properties
- SECTION 11: Toxicological information
- SECTION 12: Ecological information
- SECTION 14: Transport information
- SECTION 15: Regulatory information
- SECTION 16: Other information