

## Safety Data Sheet

### BASE COAT SPARKLING DARK

Safety Data Sheet dated 03/05/2023 version 5



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

### 1.1. Product identifier

Mixture identification:

Trade name: BASE COAT SPARKLING DARK

Trade code: L0660022

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

Recommended use: Coatings and paints, thinners, paint removers

Mono compound enamel - finish coat

Liquid pigmented dispersion

Industrial uses

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

Telephone: +39031586111

First Email: safety@lechler.eu

### 1.4. Emergency telephone number

UNITED KINGDOM: Emergency Number 0044 1606738600 - This telephone number is available during office hours only (8.45-16.45).

UNITED STATES OF AMERICA: Emergency Contact: Lechler SPA -Tel. +39-031-586301 (8.00-18.00).

## 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.
Acute Tox. 4	Harmful if inhaled.
Skin Irrit. 2	Causes skin irritation.
Eye Dam. 1	Causes serious eye damage.
Skin Sens. 1A	May cause an allergic skin reaction.
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.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H373	May cause damage to organs through prolonged or repeated exposure.
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.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER/doctor.
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 case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.
P403+P235	Store in a well-ventilated place. Keep cool.

#### Contains

2-butoxyethanol; ethylene glycol  
monobutyl ether

xylene

2-methylpropan-1-ol

3-aminomethyl-3,5,5-  
trimethylcyclohexylamine

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

None.

#### 2.3. Other hazards

Results of PBT and vPvB assessment Not a PBT, vPvB substance as per the criteria of the REACH Regulation.  
Endocrine disrupting properties-Toxicity The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher. Endocrine disrupting properties-Ecotoxicity The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Other Hazards: No other hazards

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

N.A.

### 3.2. Mixtures

Mixture identification: BASE COAT SPARKLING DARK

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

Qty	Name	Ident. Numb.	Classification	Registration Number
≥30 - ≤40 %	xylene	CAS:1330-20-7 EC:215-535-7 Index:601-022-00-9	Flam. Liq. 3, H226; Acute Tox. 4, H332; Acute Tox. 4, H312; Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT RE 2, H373; Asp. Tox. 1, H304; Aquatic Chronic 3, H412; STOT SE 3, H335	01-2119488216-32
≥20 - ≤25 %	2-methylpropan-1-ol	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

≥15 - ≤20 %	propan-2-ol	CAS:67-63-0 EC:200-661-7 Index:603-117-00-0	Flam. Liq. 2, H225; Eye Irrit. 2, H319; STOT SE 3, H336	01-2119457558-25
≥15 - ≤20 %	cyclohexanone	CAS:108-94-1 EC:203-631-1 Index:606-010-00-7	Flam. Liq. 3, H226; Acute Tox. 4, H302; Acute Tox. 4, H332; Acute Tox. 4, H312; Skin Irrit. 2, H315; Eye Dam. 1, H318	01-2119453616-35
≥3 - ≤5 %	2-butoxyethanol; ethylene glycol monobutyl ether	CAS:111-76-2 EC:203-905-0 Index:603-014-00-0	Acute Tox. 3, H331 Acute Tox. 4, H302 Skin Irrit. 2, H315 Eye Irrit. 2, H319  Acute Toxicity Estimate: ATE - Oral: 1200mg/kg bw ATE - Inhalation (Vapours): 3mg/l	01-2119475108-36
≥3 - ≤5 %	butan-2-ol	CAS:78-92-2 EC:201-158-5 Index:603-127-00-5	Flam. Liq. 3, H226; Eye Irrit. 2, H319; STOT SE 3, H335; STOT SE 3, H336	01-2119475146-36
≥1 - ≤2.5 %	Hydrocarbons, C9, aromatics	EC:918-668-5	Flam. Liq. 3, H226; Asp. Tox. 1, H304; Aquatic Chronic 2, H411; STOT SE 3, H335; STOT SE 3, H336, EUH066, DECLP(*)	01-2119455851-35
≥1 - ≤2.5 %	Reaction mass of ethylbenzene and xylene	EC:905-588-0	Flam. Liq. 3, H226; Acute Tox. 4, H332; Acute Tox. 4, H312; Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT RE 2, H373; Asp. Tox. 1, H304	01-2119539452-40
≥0.1 - ≤0.25 %	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
≥0.1 - ≤0.25 %	n-butyl acetate	CAS:123-86-4 EC:204-658-1 Index:607-025-00-1	Flam. Liq. 3, H226; STOT SE 3, H336, EUH066	01-2119485493-29
< 0.1 %	3-aminomethyl-3,5,5-trimethylcyclohexylamine	CAS:2855-13-2 EC:220-666-8 Index:612-067-00-9	Acute Tox. 4, H302 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1A, H317  Specific Concentration Limits: C ≥ 0.001%: Skin Sens. 1A H317  Acute Toxicity Estimate: ATE - Oral: 1030mg/kg bw	01-2119514687-32

(\*)DECLP Substance classified in accordance with Note P, Annex VI of EC Regulation (EC) 1272/2008.

The harmonised classification as a carcinogen or mutagen applies unless it can be shown that the substance contains less than 0,1 % w/w benzene (Einecs No 200-753-7), in which case a classification in accordance with Title II of this Regulation shall be performed also for those hazard classes. Where the substance is not classified as a carcinogen or mutagen, at least the precautionary statements (P102-)P260-P262-P301 + P310-P331 shall apply.

## 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:

If breathing is irregular or stopped, administer artificial respiration.

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 case of fire: Use dry sand, dry chemical or alcohol-resistant foam 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.

Wear breathing apparatus if exposed to vapours/dusts/aerosols.

Provide adequate ventilation.

Use appropriate respiratory protection.

See protective measures under point 7 and 8.

#### **6.2. Environmental precautions**

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.

Retain contaminated washing water and dispose it.

In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

Suitable material for taking up: absorbing material, organic, sand

#### **6.3. Methods and material for containment and cleaning up**

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

---

### **SECTION 7: Handling and storage**

#### **7.1. Precautions for safe handling**

Avoid contact with skin and eyes, inhalation of vapours and mists.

Use localized ventilation system.

Don't use empty container before they have been cleaned.

Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.

Contaminated clothing should be changed before entering eating areas.

Do not eat or drink while working.

See also section 8 for recommended protective equipment.

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

Always keep 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.

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

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### Community Occupational Exposure Limits (OEL)

	OEL Type	Country	Occupational Exposure Limit
xylene CAS: 1330-20-7	ACGIH		Long Term: 20 ppm A4, BEI - URT and eye irr; hematologic eff; CNS impair
	EH40	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	Long Term: 220 mg/m3 - 50 ppm; Short Term: 441 mg/m3 - 100 ppm Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to
	EU		Long Term: 221 mg/m3 - 50 ppm; Short Term: 442 mg/m3 - 100 ppm Behaviour Indicative 2000/39/EC
2-methylpropan-1-ol CAS: 78-83-1	EU		Identifies the possibility of significant uptake through the skin
	EH40	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	Long Term: 154 mg/m3 - 50 ppm; Short Term: 231 mg/m3 - 75 ppm
	ACGIH		Long Term: 50 ppm Skin and eye irr
propan-2-ol CAS: 67-63-0	EH40	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	Long Term: 999 mg/m3 - 400 ppm; Short Term: 1250 mg/m3 - 500 ppm
	ACGIH		Long Term: 200 ppm; Short Term: 400 ppm A4, BEI - Eye and URT irr, CNS impair
	EU		Long Term: 40.8 mg/m3 - 10 ppm; Short Term: 81.6 mg/m3 - 20 ppm Behaviour Indicative 2000/39/EC
cyclohexanone CAS: 108-94-1	EU		Identifies the possibility of significant uptake through the skin
	EH40	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	Long Term: 41 mg/m3 - 10 ppm; Short Term: 82 mg/m3 - 20 ppm Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to
	ACGIH		Long Term: 20 ppm; Short Term: 50 ppm Skin, A3, BEI - Eye and URT irr
2-butoxyethanol; ethylene glycol monobutyl ether CAS: 111-76-2	EU		Long Term: 98 mg/m3 - 20 ppm; Short Term: 246 mg/m3 - 50 ppm Behaviour Indicative 2000/39/EC
	EU		Identifies the possibility of significant uptake through the skin

	EH40	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	Long Term: 25 ppm; Short Term: 50 ppm Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to
butan-2-ol CAS: 78-92-2	EH40	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	Long Term: 308 mg/m <sup>3</sup> - 100 ppm; Short Term: 462 mg/m <sup>3</sup> - 150 ppm
	ACGIH		Long Term: 100 ppm URT irr, CNS impair
Hydrocarbons, C9, aromatics	ACGIH		Long Term: 200 mg/m <sup>3</sup> Damages to the central nervous system
acetone CAS: 67-64-1	ACGIH		Long Term: 250 ppm; Short Term: 500 ppm A4, BEI - URT and eye irr, CNS impair
	EH40	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	Long Term: 1210 mg/m <sup>3</sup> - 500 ppm; Short Term: 3620 mg/m <sup>3</sup> - 1500 ppm
	EU		Long Term: 1210 mg/m <sup>3</sup> - 500 ppm Behaviour Indicative 2000/39/EC
n-butyl acetate CAS: 123-86-4	EH40	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	Long Term: 724 mg/m <sup>3</sup> - 150 ppm; Short Term: 966 mg/m <sup>3</sup> - 200 ppm
	EU		Long Term: 241 mg/m <sup>3</sup> - 50 ppm; Short Term: 723 mg/m <sup>3</sup> - 150 ppm Behaviour Indicative 2019/1831/EU
	ACGIH		Long Term: 50 ppm; Short Term: 150 ppm Eye and URT irr

### Biological limit values

xylene CAS: 1330-20-7	Biological Indicator: xylene; Sampling Period: End of turn Value: 1.5 mg/L; Medium: Blood Remark: Croatia. Biological Exposure Limits		
	Biological Indicator: Methylhippuric acid; Sampling Period: End of turn Value: 1.5 g/l; Medium: Urine Remark: New Zealand. Biological Exposure Indices		
	Biological Indicator: xylene; Sampling Period: End of turn Value: 1.5 mg/L; Medium: Blood Remark: Slovakia. Biological Limit Values		
	Biological Indicator: sum of 2,3,4-methylhippuric acid; Sampling Period: End of turn Value: 2000 mg/L; Medium: Urine Remark: Slovakia. Biological Limit Values		
	Biological Indicator: methylhippuric acid; Sampling Period: End of turn Value: 3 g/l; Medium: Urine Remark: Romania. Biological limit values		
	Biological Indicator: methylhippuric acid (all isomers); Sampling Period: End of turn Value: 2 g/l; Medium: Urine Remark: Slovenia. BAT-values		
	Biological Indicator: xylene; Sampling Period: Immediately after exposure or after working hours Value: 1.5 mg/L; Medium: Blood Remark: TRGS 903 - Biological limit values		
	Biological Indicator: methylhippuric acid (all isomers); Sampling Period: Immediately after exposure or after working hours		

Value: 2 g/l; Medium: Urine  
Remark: TRGS 903 - Biological limit values

Biological Indicator: Methylhippuric acid; Sampling Period: Last 4 hours of shift  
Value: 2 mg/L; Medium: Urine  
Remark: South Africa. Hazardous Chemical Substances Regulations, Biological Exposure Indices.

Biological Indicator: total (o-, m-, p-)methylhippuric acid; Sampling Period: End of turn; End of working week  
Value: 800 mg/L; Medium: Urine  
Remark: Occupational exposure limits based on biological monitoring (JSOH).

Biological Indicator: methyl hippuric acid; Sampling Period: At the end of a work week / at the end of a work day / at the end of a shift  
Value: 1.5 g/l; Medium: Urine  
Remark: Austria. Regulation on health surveillance in the workplace 2014

Biological Indicator: xylene; Sampling Period: End of workday  
Value: 1 mg/L; Medium: Blood  
Remark: Austria. Regulation on health surveillance in the workplace 2014

Biological Indicator: Methylhippuric acid; Sampling Period: At the end of exposure, in 4 hours  
Value: 2 mg/L; Medium: Urine  
Remark: Kenya. Occupational Safety and Health Act (CAP.514), Schedule I, Table 3 Biological Exposure Limits

Biological Indicator: methyl hippuric acid; Sampling Period: After shift  
Value: 5 Millimoles per liter; Medium: Urine  
Remark: Finland. Biological limit values

Biological Indicator: methyl hippuric acid; Sampling Period: Immediately after exposure or after working hours  
Value: 2 g/l; Medium: Urine  
Remark: Svizzera. Lista di valori BAT

propan-2-ol  
CAS: 67-63-0

Biological Indicator: Acetone  
Value: 2 mg/g Creatinine; Medium: Urine  
Remark: Argentina. Biological Exposure Indices

Biological Indicator: Acetone; Sampling Period: End of turn; End of working week  
Value: 40 mg/L; Medium: Urine  
Remark: Maximum allowable occupational exposure limits in the workplace - Table 3. Adopted Biological Exposu

Biological Indicator: Acetone; Sampling Period: End of turn  
Value: 50 mg/L; Medium: Blood  
Remark: Croatia. Biological Exposure Limits

Biological Indicator: Acetone; Sampling Period: End of turn  
Value: 86 micromol per litre; Medium: Blood  
Remark: Croatia. Biological Exposure Limits

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

Biological Indicator: Acetone; Sampling Period: End of turn  
Value: 86 micromol per litre; Medium: Urine  
Remark: Croatia. Biological Exposure Limits

Biological Indicator: Acetone; Sampling Period: Immediately after exposure or after working hours  
Value: 25 mg/L; Medium: Blood  
Remark: TRGS 903 - Biological limit values

Biological Indicator: Acetone; Sampling Period: Immediately after exposure or after working hours  
Value: 25 mg/L; Medium: Urine  
Remark: TRGS 903 - Biological limit values

Biological Indicator: Acetone; Sampling Period: End of turn; End of working week  
Value: 40 mg/L; Medium: Urine  
Remark: Official Mexican Norm NOM-047-SSA1-2011, Environmental Health - Biological exposure indices for work

Biological Indicator: Acetone; Sampling Period: End of turn; End of working week  
Value: 40 mg/L; Medium: Urine  
Remark: Portuguese Norm 1796 - Biological Exposure Indices

Biological Indicator: Acetone; Sampling Period: End of turn  
Value: 50 mg/L; Medium: Urine

Remark: Romania. Biological limit values

Biological Indicator: Acetone; Sampling Period: End of turn  
Value: 25 mg/L; Medium: Blood  
Remark: Slovenia. BAT-values

Biological Indicator: Acetone; Sampling Period: End of turn  
Value: 25 mg/L; Medium: Urine  
Remark: Slovenia. BAT-values

Biological Indicator: Acetone; Sampling Period: FSL  
Value: 40 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: 25 mg/L; Medium: Urine  
Remark: Svizzera. Lista di valori BAT

Biological Indicator: Acetone; Sampling Period: Immediately after exposure or after working hours  
Value: 4 Millimoles per liter; Medium: Urine  
Remark: Svizzera. Lista di valori BAT

Biological Indicator: Acetone; Sampling Period: Immediately after exposure or after working hours  
Value: 25 mg/L; Medium: Blood  
Remark: Svizzera. Lista di valori BAT

Biological Indicator: Acetone; Sampling Period: Immediately after exposure or after working hours  
Value: 4 Millimoles per liter; Medium: Blood  
Remark: Svizzera. Lista di valori BAT

Biological Indicator: Acetone; Sampling Period: End of turn; End of working week  
Value: 40 mg/L; Medium: Urine  
Remark: ACGIH - Indicatori di Esposizione Biologica (BEI)

Biological Indicator: Acetone; Sampling Period: End of workday at end of workweek  
Value: 40 mg/L; Medium: Urine  
Remark: VE.Biological Exposure Limits

cyclohexanone  
CAS: 108-94-1

Biological Indicator: 1,2-cyclohexanediol; Sampling Period: End of turn; End of working week  
Value: 50 mg/g Creatinine; Medium: Urine  
Remark: Czech Republic. Biological Exposure Indices

Biological Indicator: 1,2-cyclohexanediol; Sampling Period: End of turn; End of working week  
Value: 49 mmol/mmol creatinine; Medium: Urine  
Remark: Czech Republic. Biological Exposure Indices

Biological Indicator: 1,2-Cyclohexanediol; Sampling Period: End of turn; End of working week  
Value: 80 mg/L; Medium: Urine  
Remark: Official Mexican Norm NOM-047-SSA1-2011, Environmental Health - Biological exposure indices for work

Biological Indicator: Cyclohexanol in urine ; Sampling Period: End of turn  
Value: 8 mg/L; Medium: Urine  
Remark: Official Mexican Norm NOM-047-SSA1-2011, Environmental Health - Biological exposure indices for work

Biological Indicator: 1,2-Cyclohexanediol; Sampling Period: End of turn; End of working week  
Value: 80 mg/L; Medium: Urine  
Remark: Portuguese Norm 1796 - Biological Exposure Indices

Biological Indicator: Cyclohexanol in urine ; Sampling Period: End of turn  
Value: 8 mg/L; Medium: Urine  
Remark: Portuguese Norm 1796 - Biological Exposure Indices

Biological Indicator: 1,2-cyclohexanediol; Sampling Period: FSL  
Value: 80 mg/L; Medium: Urine  
Remark: Occupational Exposure Limits for Chemical Agents in Spain - Biological Exposure Values

Biological Indicator: Cyclohexanol in urine ; Sampling Period: End of workday  
Value: 8 mg/L; Medium: Urine  
Remark: Occupational Exposure Limits for Chemical Agents in Spain - Biological Exposure Values

Biological Indicator: total 1,2-cyclohexanediol; Sampling Period: In case of long-term exposure: after more than one shift  
Value: 100 mg/L; Medium: Urine  
Remark: Svizzera. Lista di valori BAT

Biological Indicator: total 1,2-cyclohexanediol; Sampling Period: Immediately after exposure or after working hours  
Value: 86 Millimoles per liter; Medium: Urine



Remark: Svizzera. Lista di valori BAT

Biological Indicator: total cyclohexanol; Sampling Period: In case of long-term exposure: after more than one shift

Value: 12 mg/L; Medium: Urine

Remark: Svizzera. Lista di valori BAT

Biological Indicator: total cyclohexanol; Sampling Period: Immediately after exposure or after working hours

Value: 12 Millimoles per liter; Medium: Urine

Remark: Svizzera. Lista di valori BAT

Biological Indicator: Cyclohexanol in urine ; Sampling Period: After shift

Value: 2 Millimoles per mole Creatinine; Medium: Urine

Remark: UK. Biological monitoring guidance values

Biological Indicator: 1,2-Cyclohexanediol; Sampling Period: End of turn; End of working week

Value: 80 mg/L; Medium: Urine

Remark: ACGIH - Indicatori di Esposizione Biologica (BEI)

Biological Indicator: Cyclohexanol in urine ; Sampling Period: End of turn

Value: 8 mg/L; Medium: Urine

Remark: ACGIH - Indicatori di Esposizione Biologica (BEI)

Biological Indicator: 1,2-cyclohexanediene; Sampling Period: End of workday at end of workweek

Value: 80 mg/L; Medium: Urine

Remark: VE.Biological Exposure Limits

Biological Indicator: Cyclohexanol in urine ; Sampling Period: End of workday

Value: 8 mg/L; Medium: Urine

Remark: VE.Biological Exposure Limits

Sampling Period: In case of long-term exposure: after more than one shift

Sampling Period: Immediately after exposure or after working hours

Sampling Period: In case of long-term exposure: after more than one shift

Sampling Period: Immediately after exposure or after working hours

Biological Indicator: Butoxyacetic acid ( BAA ); Sampling Period: End of turn

Value: 200 mg/g Creatinine; Medium: Urine

Remark: Maximum allowable occupational exposure limits in the workplace - Table 3. Adopted Biological Exposu

Biological Indicator: Butoxyacetic acid ( BAA ); Sampling Period: End of turn; End of working week

Value: 200 mg/g Creatinine; Medium: Urine

Remark: Czech Republic. Biological Exposure Indices

Biological Indicator: Butoxyacetic acid ( BAA ); Sampling Period: End of turn; End of working week

Value: 17 mmol/mmol creatinine; Medium: Urine

Remark: Czech Republic. Biological Exposure Indices

Biological Indicator: Butoxyacetic acid ( BAA ); Sampling Period: Immediately after exposure or after working hours

Value: 150 mg/g Creatinine; Medium: Urine

Remark: TRGS 903 - Biological limit values

Biological Indicator: Butoxyacetic acid ( BAA ); Sampling Period: In case of long-term exposure: after more than one shift

Value: 100 mg/L; Medium: Urine

Remark: TRGS 903 - Biological limit values

Biological Indicator: Butoxyacetic acid ( BAA ); Sampling Period: End of turn

Value: 200 mg/g Creatinine; Medium: Urine

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

Biological Indicator: Butoxyacetic acid ( BAA ); Sampling Period: End of turn

Value: 200 mg/g Creatinine; Medium: Urine

Remark: Portuguese Norm 1796 - Biological Exposure Indices

Biological Indicator: methoxy acetic acid; Sampling Period: during long-term exposure: at the end of the work shift after several consecutive workdays

Value: 150 mg/g Creatinine; Medium: Urine

Remark: Slovenia. BAT-values

Biological Indicator: Butoxyacetic acid ( BAA ); Sampling Period: End of workday

Value: 200 mg/g Creatinine; Medium: Urine

Remark: Occupational Exposure Limits for Chemical Agents in Spain - Biological Exposure Values

Biological Indicator: 2-butoxy acetic acid; Sampling Period: Immediately after exposure or after working

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

hours  
Value: 150 mg/g Creatinine; Medium: Urine  
Remark: Svizzera. Lista di valori BAT

Biological Indicator: Butoxyacetic acid ( BAA ); Sampling Period: After shift  
Value: 240 Millimoles per mole Creatinine; Medium: Urine  
Remark: UK. Biological monitoring guidance values

Biological Indicator: Butoxyacetic acid ( BAA ); Sampling Period: End of turn  
Value: 200 mg/g Creatinine; Medium: Urine  
Remark: ACGIH - Indicatori di Esposizione Biologica (BEI)

Biological Indicator: Butoxyacetic acid ( BAA ); Sampling Period: End of workday  
Value: 200 mg/g Creatinine; Medium: Urine  
Remark: VE.Biological Exposure Limits

Sampling Period: In case of long-term exposure: after more than one shift

Sampling Period: End of turn

Sampling Period: In case of long-term exposure: after more than one shift

Biological Indicator: Acetone; Sampling Period: End of turn  
Value: 50 mg/L; Medium: Urine  
Remark: Argentina. Biological Exposure Indices

Biological Indicator: Acetone; Sampling Period: End of turn  
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: End of turn  
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: End of turn  
Value: 34 Millimoles per liter; Medium: Blood  
Remark: Croatia. Biological Exposure Limits

Biological Indicator: Acetone; Sampling Period: End of turn  
Value: 20 mg/L; Medium: Blood  
Remark: Croatia. Biological Exposure Limits

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

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

Biological Indicator: Acetone; Sampling Period: End of turn  
Value: 50 mg/L; Medium: Urine  
Remark: Romania. Biological limit values

Biological Indicator: Acetone; Sampling Period: End of turn  
Value: 80 mg/L; Medium: Urine  
Remark: Slovakia. Biological Limit Values

Biological Indicator: Acetone; Sampling Period: End of turn  
Value: 1378 micromol per litre; Medium: Urine

acetone  
CAS: 67-64-1

Remark: Slovakia. Biological Limit Values

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

Biological Indicator: Acetone; Sampling Period: End of turn  
Value: 1039 micromoles per millimole creatinine; Medium: Urine  
Remark: Slovakia. Biological Limit Values

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

Biological Indicator: Acetone; Sampling Period: End of turn  
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: End of turn  
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: End of turn

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

xylene  
CAS: 1330-20-7

Exposure Route: Fresh Water; PNEC Limit: 0.32 mg/l

Exposure Route: Intermittent releases (fresh water); PNEC Limit: 0.32 mg/l

Exposure Route: Marine water; PNEC Limit: 0.32 mg/l

Exposure Route: Freshwater sediments; PNEC Limit: 12.46 mg/kg

Exposure Route: Marine water sediments; PNEC Limit: 12.46 mg/kg

Exposure Route: Soil; PNEC Limit: 2.31 mg/kg

Exposure Route: Microorganisms in sewage treatments; PNEC Limit: 6.58 mg/l

Exposure Route: Fresh Water; PNEC Limit: 140.9 mg/l

propan-2-ol  
CAS: 67-63-0

Exposure Route: Intermittent releases (fresh water); PNEC Limit: 140.9 mg/l

Exposure Route: Marine water; PNEC Limit: 140.9 mg/l

Exposure Route: Freshwater sediments; PNEC Limit: 552 mg/kg

Exposure Route: Marine water sediments; PNEC Limit: 552 mg/kg

Exposure Route: Soil; PNEC Limit: 28 mg/kg

Exposure Route: Microorganisms in sewage treatments; PNEC Limit: 2251 mg/l

Exposure Route: Freshwater sediments; PNEC Limit: 0.033 mg/l

cyclohexanone  
CAS: 108-94-1

Exposure Route: Marine water; PNEC Limit: 0.003 mg/l

Exposure Route: Intermittent releases (fresh water); PNEC Limit: 0.329 mg/l

Exposure Route: Microorganisms in sewage treatments; PNEC Limit: 10 mg/l

Exposure Route: Soil; PNEC Limit: 0.014 mg/kg

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

Exposure Route: Fresh Water; PNEC Limit: 8.8 mg/l

Exposure Route: Intermittent releases (fresh water); PNEC Limit: 26.4 mg/l

Exposure Route: Marine water; PNEC Limit: 0.88 mg/l  
Exposure Route: Freshwater sediments; PNEC Limit: 34.6 mg/kg dry weight (d.w.)  
Exposure Route: Marine water sediments; PNEC Limit: 3.46 mg/kg dry weight (d.w.)  
Exposure Route: Soil; PNEC Limit: 2.33 mg/kg dry weight (d.w.)  
Exposure Route: Microorganisms in sewage treatments; PNEC Limit: 436 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  
Exposure Route: Fresh Water; PNEC Limit: 0.18 mg/l

n-butyl acetate  
CAS: 123-86-4

Exposure Route: Intermittent releases (fresh water); PNEC Limit: 0.36 mg/l  
Exposure Route: Marine water; PNEC Limit: 0.01 mg/l  
Exposure Route: Freshwater sediments; PNEC Limit: 0.98 mg/kg  
Exposure Route: Marine water sediments; PNEC Limit: 0.09 mg/kg  
Exposure Route: Soil; PNEC Limit: 0.09 mg/kg  
Exposure Route: Microorganisms in sewage treatments; PNEC Limit: 35.6 mg/l

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

xylene  
CAS: 1330-20-7

Exposure Route: Human Inhalation; Exposure Frequency: Long Term, systemic effects  
Consumer: 65.3 mg/m<sup>3</sup>

Exposure Route: Oral; Exposure Frequency: Long Term, systemic effects  
Consumer: 12.5 mg/kg

Exposure Route: Human Inhalation; Exposure Frequency: Short Term, local effects  
Worker Professional: 442 mg/kg

Exposure Route: Human Dermal; Exposure Frequency: Long Term, systemic effects  
Worker Professional: 212 mg/kg

Exposure Route: Human Inhalation; Exposure Frequency: Long Term, systemic effects  
Worker Professional: 221 mg/m<sup>3</sup>

propan-2-ol  
CAS: 67-63-0

Exposure Route: Human Dermal; Exposure Frequency: Long Term, systemic effects

Exposure Route: Human Inhalation; Exposure Frequency: Long Term, systemic effects  
Consumer: 89 mg/m<sup>3</sup>

Exposure Route: Oral; Exposure Frequency: Long Term, systemic effects

Exposure Route: Human Dermal; Exposure Frequency: Long Term, systemic effects

Exposure Route: Human Inhalation; Exposure Frequency: Long Term, systemic effects  
Worker Professional: 500 mg/m<sup>3</sup>

cyclohexanone  
CAS: 108-94-1

Exposure Route: Oral; Exposure Frequency: Short Term, systemic effects  
Consumer: 1.5 mg/kg

Exposure Route: Oral; Exposure Frequency: Long Term, systemic effects  
Consumer: 1.5 mg/kg

Exposure Route: Human Inhalation; Exposure Frequency: Short Term (acute)  
Consumer: 40 mg/m<sup>3</sup>

Exposure Route: Human Inhalation; Exposure Frequency: Short Term, systemic effects  
Consumer: 20 mg/m<sup>3</sup>

Exposure Route: Human Inhalation; Exposure Frequency: Long Term, local effects  
Consumer: 20 mg/m<sup>3</sup>

Exposure Route: Human Inhalation; Exposure Frequency: Long Term, systemic effects  
Consumer: 10 mg/m<sup>3</sup>

Exposure Route: Human Dermal; Exposure Frequency: Long Term, systemic effects  
Consumer: 1 mg/kg

Exposure Route: Human Dermal; Exposure Frequency: Short Term, systemic effects  
Consumer: 1 mg/kg

Exposure Route: Human Inhalation; Exposure Frequency: Short Term (acute)  
Worker Professional: 80 mg/m3

Exposure Route: Human Inhalation; Exposure Frequency: Short Term, systemic effects  
Worker Professional: 80 mg/m3

Exposure Route: Human Inhalation; Exposure Frequency: Long Term, local effects  
Worker Professional: 40 mg/m3

Exposure Route: Human Inhalation; Exposure Frequency: Long Term, systemic effects  
Worker Professional: 40 mg/m3

Exposure Route: Human Dermal; Exposure Frequency: Long Term, systemic effects  
Worker Professional: 4 mg/kg

Exposure Route: Human Dermal; Exposure Frequency: Short Term, systemic effects  
Worker Professional: 4 mg/kg

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

Exposure Route: Human Inhalation; Exposure Frequency: Short Term, local effects  
Consumer: 147 mg/m3

Exposure Route: Human Inhalation; Exposure Frequency: Short Term, systemic effects  
Consumer: 426 mg/m3

Exposure Route: Human Oral; Exposure Frequency: Short Term, systemic effects  
Consumer: 26.7 mg/kg dry weight (d.w.)

Exposure Route: Human Inhalation; Exposure Frequency: Long Term, systemic effects  
Consumer: 59 mg/m3

Exposure Route: Human Oral; Exposure Frequency: Long Term, systemic effects  
Consumer: 6.3 mg/kg dry weight (d.w.)

Exposure Route: Human Inhalation; Exposure Frequency: Short Term, local effects  
Worker Professional: 246 mg/m3

Exposure Route: Human Inhalation; Exposure Frequency: Short Term, systemic effects  
Worker Professional: 1091 mg/m3

Exposure Route: Human Inhalation; Exposure Frequency: Long Term, systemic effects  
Worker Professional: 98 mg/m3

Hydrocarbons, C9, aromatics

Exposure Route: Oral; Exposure Frequency: Long Term, systemic effects  
Consumer: 11 mg/kg

Exposure Route: Human Inhalation; Exposure Frequency: Long Term, systemic effects  
Consumer: 32 mg/m3

Exposure Route: Human Dermal; Exposure Frequency: Long Term, systemic effects  
Consumer: 11 mg/kg

Exposure Route: Human Inhalation; Exposure Frequency: Long Term, systemic effects  
Worker Professional: 150 mg/m3

Exposure Route: Human Dermal; Exposure Frequency: Long Term, systemic effects  
Worker Professional: 25 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/m3

Exposure Route: Human Inhalation; Exposure Frequency: Short Term (acute)  
Worker Professional: 2420 mg/m3

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/m3

n-butyl acetate  
CAS: 123-86-4

Exposure Route: Human Inhalation; Exposure Frequency: Long Term, systemic effects  
Worker Industry: 300 mg/m3

Exposure Route: Human Inhalation; Exposure Frequency: Short Term, systemic effects  
Worker Industry: 600 mg/m3

Exposure Route: Human Inhalation; Exposure Frequency: Long Term, local effects  
Worker Industry: 300 mg/m3

Exposure Route: Human Inhalation; Exposure Frequency: Short Term, local effects  
Worker Industry: 600 mg/m3

Exposure Route: Human Dermal; Exposure Frequency: Long Term, systemic effects  
Worker Industry: 11 mg/kg dry weight (d.w.)

Exposure Route: Human Dermal; Exposure Frequency: Short Term, systemic effects  
Worker Industry: 11 mg/kg dry weight (d.w.)

Exposure Route: Human Inhalation; Exposure Frequency: Long Term, systemic effects  
Consumer: 35.7 mg/m3

Exposure Route: Human Inhalation; Exposure Frequency: Short Term, systemic effects  
Consumer: 300 mg/m3

Exposure Route: Human Inhalation; Exposure Frequency: Long Term, local effects  
Consumer: 35.7 mg/m3

Exposure Route: Human Inhalation; Exposure Frequency: Short Term, local effects  
Consumer: 300 mg/m3

Exposure Route: Human Dermal; Exposure Frequency: Long Term, systemic effects  
Consumer: 6 mg/kg dry weight (d.w.)

Exposure Route: Human Dermal; Exposure Frequency: Short Term, systemic effects  
Consumer: 6 mg/kg dry weight (d.w.)

Exposure Route: Human Oral; Exposure Frequency: Long Term, systemic effects  
Consumer: 2 mg/kg dry weight (d.w.)

Exposure Route: Human Oral; Exposure Frequency: Short Term, systemic effects  
Consumer: 2 mg/kg dry weight (d.w.)

## 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.

---

## SECTION 9: Physical and chemical properties

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

Physical State: Liquid

Colour: Silver

Odour: N.A.

pH: Not Relevant

Kinematic viscosity:  $\leq 20,5 \text{ mm}^2/\text{sec}$  (40 °C)

Melting point / freezing point: N.A.

Initial boiling point and boiling range: N.A.

Flash point: 16.5 °C (61.7 °F)

Upper/lower flammability or explosive limits: N.A.

Vapour density: N.A.

Vapour pressure: N.A.

Relative density: 0.87 g/cm<sup>3</sup>  
Solubility in water: N.A.  
Solubility in oil: N.A.  
Partition coefficient (n-octanol/water): 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) ≤ 20,5 mm<sup>2</sup>/sec (40 °C)  
Viscosity: = 17.00 s - Method: ASTM D 1200 82 - Section: 3.00 mm

**Particle characteristics:**

Particle size: N.A.

**9.2. Other information**

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

---

**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.

---

**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	The product is classified: Acute Tox. 4(H332) ATEmix - Oral : 2973.98 mg/kg bw ATEmix - Dermal : 2138 mg/kg bw ATEmix - Inhalation (Vapours) : 16.3205 mg/l
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	The product is classified: Skin Sens. 1A(H317)
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	Not classified Based on available data, the classification criteria are not met
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:**

xylene	a) acute toxicity	LD50 Oral Mouse = 5627 mg/kg LC50 Inhalation Rat = 6700 Ppm 4h LD50 Skin Rabbit > 5000 mg/kg
propan-2-ol	a) acute toxicity	LD50 Oral Rat = 5840 mg/kg LC50 Inhalation Rat > 10000 Ppm 6h

2-butoxyethanol; ethylene glycol monobutyl ether	a) acute toxicity	ATE - Oral : 1200 mg/kg bw	
		ATE - Inhalation (Vapours) : 3 mg/l	
		LD50 Oral Rat = 1746 mg/kg LD50 Skin Rabbit > 2000 mg/kg	OECD Test Guideline 401 OECD Test Guideline 402
Hydrocarbons, C9, aromatics	a) acute toxicity	LD50 Oral Rat = 3592 mg/kg	OECD Test Guideline 401
		LD50 Skin Rabbit > 3160 mg/kg	OECD Test Guideline 402
	f) carcinogenicity	Carcinogenicity - Not classified - Substance classified in accordance with Note P, Annex VI of EC Regulation (EC) 1272/2008.	
acetone	a) acute toxicity	LD50 Oral Rat = 5800 mg/kg LC50 Inhalation Rat = 76 mg/l 4h LD50 Skin Rabbit > 15800 mg/kg	
n-butyl acetate	a) acute toxicity	LD50 Oral Rat = 10760 mg/kg	OECD Test Guideline 423
		LC50 Inhalation > 20 mg/l 4h	
		LD50 Skin Rabbit > 14112 mg/kg	OECD Test Guideline 402
3-aminomethyl-3,5,5- trimethylcyclohexylamine	a) acute toxicity	ATE - Oral : 1030 mg/kg bw	
		LD50 Oral Rat = 1030 mg/kg	

## 11.2. Information on other hazards

### Endocrine disrupting properties:

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

## 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
xylene	CAS: 1330-20-7 - EINECS: 215-535-7 - INDEX: 601-022-00-9	a) Aquatic acute toxicity : LC50 Fish Oncorhynchus mykiss (rainbow trout) = 2.6 mg/L 96 H
		a) Aquatic acute toxicity : IC50 Invertebrates Daphnia magna (Water flea) = 1 mg/L 24 H
		e) Plant toxicity : ECO Algae Pseudokirchneriella subcapitata (green algae) = 0.44 mg/L 72 H
		b) Aquatic chronic toxicity : NOEC Fish Oncorhynchus mykiss (rainbow trout) > 1.3 mg/L 56 D
		e) Plant toxicity : Algae Pseudokirchneriella subcapitata (green algae) = 4.36 mg/L 72 H
propan-2-ol	CAS: 67-63-0 - EINECS: 200-661-7 - INDEX:	a) Aquatic acute toxicity : LC50 Fish Pimephales promelas (fathead minnow) = 9640 mg/L 96 H



		a) Aquatic acute toxicity : EC50 Invertebrates <i>Daphnia magna</i> (Water flea) > 10000 mg/L 24 H
		e) Plant toxicity : EC50 Algae <i>Scenedesmus quadricauda</i> (Green algae) = 1800 mg/L 7 D
2-butoxyethanol; ethylene glycol monobutyl ether	CAS: 111-76-2 - EINECS: 203-905-0 - INDEX: 603-014-00-0	a) Aquatic acute toxicity : LC50 Fish <i>Oncorhynchus mykiss</i> (rainbow trout) = 1474 mg/L 96 H OECD Test Guideline 203
		a) Aquatic acute toxicity : EC50 Invertebrates <i>Daphnia magna</i> (Water flea) = 1550 mg/L 48 H OECD Test Guideline 202
		e) Plant toxicity : EC50 Algae <i>Pseudokirchneriella subcapitata</i> (green algae) = 911 mg/L 72 H OECD Test Guideline 201
		b) Aquatic chronic toxicity : NOEC Fish <i>Brachydanio rerio</i> > 100 mg/L 21 D OECD Test Guideline 204
Hydrocarbons, C9, aromatics	EINECS: 918-668-5	a) Aquatic acute toxicity : LC50 Fish <i>Oncorhynchus mykiss</i> (rainbow trout) = 9.2 mg/L 96 H
		a) Aquatic acute toxicity : EC50 Invertebrates <i>Daphnia magna</i> (Water flea) = 3.2 mg/L 48 H
		e) Plant toxicity : Algae algae = 2.9 mg/L 72 H
acetone	CAS: 67-64-1 - EINECS: 200-662-2 - INDEX: 606-001-00-8	a) Aquatic acute toxicity : LC50 Fish <i>Pimephales promelas</i> (fathead minnow) = 8120 mg/L 96 H
		a) Aquatic acute toxicity : EC50 Invertebrates <i>Daphnia</i> (water flea) = 8800 mg/L 48 H
		e) Plant toxicity : NOEC Algae algae = 530 mg/L 8 D
n-butyl acetate	CAS: 123-86-4 - EINECS: 204-658-1 - INDEX: 607-025-00-1	a) Aquatic acute toxicity : LC50 Fish <i>Pimephales promelas</i> (fathead minnow) = 18 mg/L 96 H OECD Test Guideline 203
		a) Aquatic acute toxicity : EC50 Invertebrates <i>Daphnia magna</i> (Water flea) = 44 mg/L 48 H OECD Test Guideline 202
		e) Plant toxicity : EC50 Algae <i>Selenastrum capricornutum</i> (green algae) = 397 mg/L 72 H OECD Test Guideline 201
		c) Bacteria toxicity : IC50 Microorganisms <i>Tetrahymena pyriformis</i> = 356 mg/L 40 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**

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

**12.7. Other adverse effects**

N.A.

**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

---

## SECTION 14: Transport information

### 14.1. UN number or ID number

1263

### 14.2. UN proper shipping name

ADR-Shipping Name: PAINT

IATA-Shipping Name: PAINT

IMDG-Shipping Name: PAINT

### 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 and handling: Category B

IMDG-Segregation: -

IMDG-Subsidiary hazards: -

IMDG-Special Provisions: 163 367

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

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) 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. 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)  
Regulation (EU) n. 2021/849 (ATP 17 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: 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
----------------------------------	------	-------

Regulation (EU) No 649/2012 (PIC regulation)

No substances listed

**German Water Hazard Class.**

2: Hazard to waters

**SVHC Substances:**

No data available

**DIRECTIVE 2010/75/EU (VOC directive)**

Volatile Organic compounds - VOCs = 96.42 %  
Volatile Organic compounds - VOCs = 838.89 g/L  
Estimated Total Content of Water 0.00 %  
Estimated Total Solid Content 3.58 %

**Storage Class (TRGS 510)**

Storage Class (TRGS 510) Flammable liquid substances

**Classification according to VbF**

Classification according to VbF A I - Flash point less than 21 °C, at 15 °C not miscible in water

**Mal-Code (Denmark)**

Mal-Code (Denmark)	Mal Factor	Unit of Measure	Revision Status / Number	Regulatory Base
5 - 3	3.962	m3 air/10 g	1993	Administrative determined MAL-Factors

**Biocides**

REGULATION (EC) No 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.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H373	May cause damage to organs through prolonged or repeated exposure.

H411	Toxic to aquatic life with long lasting effects.
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
3.1/3/Inhal	Acute Tox. 3	Acute toxicity (inhalation), Category 3
3.1/4/Dermal	Acute Tox. 4	Acute toxicity (dermal), Category 4
3.1/4/Inhal	Acute Tox. 4	Acute toxicity (inhalation), Category 4
3.1/4/Oral	Acute Tox. 4	Acute toxicity (oral), Category 4
3.10/1	Asp. Tox. 1	Aspiration hazard, Category 1
3.2/1B	Skin Corr. 1B	Skin corrosion, Category 1B
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
3.4.2/1A	Skin Sens. 1A	Skin Sensitisation, Category 1A
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/C2	Aquatic Chronic 2	Chronic (long term) aquatic hazard, 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
---	--------------------------

2.6/2	On basis of test data
3.1/4/Inhal	Calculation method
3.2/2	Calculation method
3.3/1	Calculation method
3.4.2/1A	Calculation method
3.8/3	Calculation method
3.8/3	Calculation method
3.9/2	Calculation method
3.10/1	Calculation method
4.1/C3	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 8: Exposure controls/personal protection
- SECTION 9: Physical and chemical properties
- SECTION 11: Toxicological information
- SECTION 12: Ecological information
- SECTION 14: Transport information
- SECTION 16: Other information