

# Safety Data Sheet

According to Annex II to REACH - Regulation 2020/878 and to Annex II to UK REACH

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

### 1.1. Product identifier

Code: 0035100  
Product name: SPOTLESS  
Chemical name and synonym: SPOTLESS

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

Field of use: SU22 - Professional uses SU - 21 Consumer uses  
Product category: PC35 - Washing and cleaning products (including solvent based products)  
Description/Usage: Alkaline Concentrated Cleaner/Solvent for Work Clothes

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

Name: MARBEC S.R.L.  
Full address: VIA CROCE ROSSA 5/i  
District and Country: 51037 MONTALE (PISTOIA)  
ITALIA

Tel. +039 0573/959848

Fax

e-mail address of the competent person

responsible for the Safety Data Sheet

Supplier: info@marbec.it

### 1.4. Emergency telephone number

For urgent inquiries refer to  
MARBEC srl  
0573959848 h8.30-13 h14-18 o 3357267921  
Numero telefonico di Centri Antiveleni attivi 24/24 ore  
IRCSS Fondazione Maugeri –  
Pavia 0039-0382-24444  
CAV Ospedali Riuniti –  
Bergamo 0039-800-883300  
CAV Ospedale Niguarda Ca` Granda –  
Milano 0039-02-66101029  
CAV Ospedale Careggi- Firenze 0039-055-7947819  
CAV Policlinico Gemelli –  
Roma 0039-06-3054343  
CAV Policlinico Umberto I –  
Roma 0039-06 49978000  
CAV Ospedale Cardarelli –  
Napoli 0039-081 5453333  
CAV Azienda Ospedaliera Integrata Verona - Verona 800011858

## SECTION 2. Hazards identification

### 2.1. Classification of the substance or mixture

The product is classified as hazardous pursuant to the provisions set forth in (EC) Regulation 1272/2008 (CLP) (and subsequent amendments and supplements). The product thus requires a safety datasheet that complies with the provisions of (EU) Regulation 2020/878. Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet.

**Hazard classification and indication:**

Skin corrosion, category 1A	H314	Causes severe skin burns and eye damage.
Serious eye damage, category 1	H318	Causes serious eye damage.
Hazardous to the aquatic environment, chronic toxicity, category 3	H412	Harmful to aquatic life with long lasting effects.

**2.2. Label elements**

Hazard labelling pursuant to EC Regulation 1272/2008 (CLP) and subsequent amendments and supplements.

**Hazard pictograms:**

Signal words:                    Danger

**Hazard statements:**

<b>H314</b>	Causes severe skin burns and eye damage.
<b>H412</b>	Harmful to aquatic life with long lasting effects.
<b>EUH208</b>	Contains: , d-Limonene, sweet orange Brasil oil May produce an allergic reaction.

**Precautionary statements:**

<b>P260</b>	Do not breathe dust / fume / gas / mist / vapours / spray.
<b>P305+P351+P338</b>	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
<b>P303+P361+P353</b>	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
<b>P280</b>	Wear protective gloves/ protective clothing / eye protection / face protection.
<b>P310</b>	Immediately call a POISON CENTER / doctor / . . .
<b>P301+P330+P331</b>	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
<b>P273</b>	Avoid release to the environment.

**Contains:**                    POTASSIUM HYDROXIDE,  
Alcohols, C11-13-branched, ethoxylated (>2.5 moles EO)  
Isotridecanol, ethoxylated (>5-20EO)

**Ingredients in accordance with Regulation (EC) No 648/2004**

Non-ionic surfactants 15%-30%, anionic surfactants <5%, potassium hydroxide. Perfume: d-limonene, Orange Sweet Brasil Oil.

**2.3. Other hazards**

On the basis of available data, the product does not contain any PBT or vPvB in percentage  $\geq$  than 0,1%.

The product does not contain substances with endocrine disrupting properties in concentration  $\geq$  0.1%.

### SECTION 3. Composition/information on ingredients

#### 3.2. Mixtures

Contains:

Identification	x = Conc. %	Classification (EC) 1272/2008 (CLP)
<b>Isotridecanol, ethoxylated (&gt;5-20EO)</b>		
CAS 69011-36-5	$9 \leq x < 25$	Eye Dam. 1 H318, Aquatic Chronic 3 H412
EC 500-241-6		
INDEX -		
REACH Reg. 01-211997362-32-xxxx		
<b>3-BUTOXY-2-PROPANOL</b>		
CAS 5131-66-8	$3 \leq x < 9$	Flam. Liq. 3 H226, Eye Irrit. 2 H319, Skin Irrit. 2 H315
EC 225-878-4		
INDEX 603-052-00-8		
REACH Reg. 01-2119475527-28-xxxx		
<b>Alcoli, C11-13-ramificati, etossilati (&gt;2.5 moli EO)</b>	$3 \leq x < 9$	Acute Tox. 4 H302, Eye Dam. 1 H318 LD50 Orale: >300 mg/kg
CAS 68439-54-3		
CE		
INDEX -		
<b>1-METHOXY-2-PROPANOL</b>		
CAS 107-98-2	$3 \leq x < 9$	Flam. Liq. 3 H226, STOT SE 3 H336
EC 203-539-1		
INDEX 603-064-00-3		
REACH Reg. 01-2119457435-35		
<b>2-BUTOXYETHANOL</b>		
CAS 111-76-2	$3 \leq x < 9$	Acute Tox. 4 H302, Acute Tox. 4 H332, Eye Irrit. 2 H319, Skin Irrit. 2 H315 LD50 Oral: 1200 mg/kg, STA Inhalation vapours: 11 mg/l
EC 203-905-0		
INDEX 603-014-00-0		
REACH Reg. 01-2119475108-36-0005		
<b>OLEIC ACID</b>		
CAS 67701-08-0	$1 \leq x < 3$	
EC		
INDEX -		
<b>Sodium etasulphate</b>		
CAS 126-92-1	$1 \leq x < 3$	Eye Dam. 1 H318, Skin Irrit. 2 H315
EC 204-812-8		

INDEX -

REACH Reg. 01-2119971586-23-  
xxxx

**POTASSIUM HYDROXIDE**

CAS 1310-58-3

$1 \leq x < 2$

Met. Corr. 1 H290, Acute Tox. 4 H302, Skin Corr. 1A H314, Eye Dam. 1 H318

EC 215-181-3

Skin Corr. 1B H314:  $\geq 2\%$ , Skin Irrit. 2 H315:  $\geq 0,5\%$ , Eye Dam. 1 H318:  $\geq 2\%$ , Eye Irrit. 2 H319:  $\geq 0,5\%$

INDEX 019-002-00-8

LD50 Oral: 333

REACH Reg. 01-2119487136-33-  
xxxx

**TRETASODIC N,N-BIS(CARBOXYLATOMETHYL)-L-GLUTAMATE**

CAS 51981-21-6

$1 \leq x < 3$

EC 257-573-7

INDEX -

REACH Reg. 01-2119493601-38

**d-Limonene**

CAS 5989-27-5

$0 \leq x < 0,25$

Flam. Liq. 3 H226, Asp. Tox. 1 H304, Skin Irrit. 2 H315, Skin Sens. 1 H317, Aquatic Chronic 1 H410 M=1

EC 227-813-5

INDEX 601-029-00-7

REACH Reg. 01-2119529223-47

**Orange Sweet Brasil Oil**

CAS 8028-48-6

$0 \leq x < 0,5$

Flam. Liq. 3 H226, Asp. Tox. 1 H304, Skin Irrit. 2 H315, Skin Sens. 1 H317, Aquatic Chronic 2 H411

EC 232-433-8

INDEX -

REACH Reg. 01-2119493353-35-  
XXXX

The full wording of hazard (H) phrases is given in section 16 of the sheet.

## SECTION 4. First aid measures

### 4.1. Description of first aid measures

EYES: Remove contact lenses, if present. Wash immediately with plenty of water for at least 30-60 minutes, opening the eyelids fully. Get medical advice/attention.

SKIN: Remove contaminated clothing. Rinse skin with a shower immediately. Get medical advice/attention.

INGESTION: Have the subject drink as much water as possible. Get medical advice/attention. Do not induce vomiting unless explicitly authorised by a doctor.

INHALATION: Get medical advice/attention immediately. Remove victim to fresh air, away from the accident scene. If the subject stops breathing, administer artificial respiration. Take suitable precautions for rescue workers.

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

Specific information on symptoms and effects caused by the product are unknown.

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

Information not available

## SECTION 5. Firefighting measures

### 5.1. Extinguishing media

#### SUITABLE EXTINGUISHING EQUIPMENT

Choose the most appropriate extinguishing equipment for the specific case.

#### UNSUITABLE EXTINGUISHING EQUIPMENT

None in particular.

### 5.2. Special hazards arising from the substance or mixture

#### HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE

The product is neither flammable nor combustible.

### 5.3. Advice for firefighters

#### SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS

Normal fire fighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).

## SECTION 6. Accidental release measures

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

Block the leakage if there is no hazard.

Wear suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing. These indications apply for both processing staff and those involved in emergency procedures.

### 6.2. Environmental precautions

The product must not penetrate into the sewer system or come into contact with surface water or ground water.

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

Collect the leaked product into a suitable container. Evaluate the compatibility of the container to be used, by checking section 10. Absorb the remainder with inert absorbent material.

Make sure the leakage site is well aired. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

### 6.4. Reference to other sections

Any information on personal protection and disposal is given in sections 8 and 13.

## SECTION 7. Handling and storage

### 7.1. Precautions for safe handling

Ensure that there is an adequate earthing system for the equipment and personnel. Avoid contact with eyes and skin. Do not breathe powders, vapours or mists. Do not eat, drink or smoke during use. Wash hands after use. Avoid leakage of the product into the environment.

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

Store only in the original container. Store in a ventilated and dry place, far away from sources of ignition. Keep containers well sealed. Keep the product

in clearly labelled containers. Avoid overheating. Avoid violent blows. Keep containers away from any incompatible materials, see section 10 for details.

Storage class TRGS 510 (Germany):  
12

### 7.3. Specific end use(s)

Information not available

## SECTION 8. Exposure controls/personal protection

### 8.1. Control parameters

Regulatory References:

DEU	Deutschland	Technischen Regeln für Gefahrstoffe (TRGS 900) - Liste der Arbeitsplatzgrenzwerte und Kurzzeitwerte. MAK- und BAT-Werte-Liste 2020, Ständige Senatskommission zur Prüfung gesundheitsschädlicher Arbeitsstoffe, Mitteilung 56
ESP	España	Límites de exposición profesional para agentes químicos en España 2021
FRA	France	Valeurs limites d'exposition professionnelle aux agents chimiques en France. ED 984 - INRS
ITA	Italia	Decreto Legislativo 9 Aprile 2008, n.81
PRT	Portugal	Decreto-Lei n.º 1/2021 de 6 de janeiro, valores-limite de exposição profissional indicativos para os agentes químicos. Decreto-Lei n.º 35/2020 de 13 de julho, proteção dos trabalhadores contra os riscos ligados à exposição durante o trabalho a agentes cancerígenos ou mutagénicos
GBR	United Kingdom	EH40/2005 Workplace exposure limits (Fourth Edition 2020)
EU	OEL EU	Directive (EU) 2019/1831; Directive (EU) 2019/130; Directive (EU) 2019/983; Directive (EU) 2017/2398; Directive (EU) 2017/164; Directive 2009/161/EU; Directive 2006/15/EC; Directive 2004/37/EC; Directive 2000/39/EC; Directive 98/24/EC; Directive 91/322/EEC.
	TLV-ACGIH	ACGIH 2021

### 3-BUTOXY-2-PROPANOL

Predicted no-effect concentration - PNEC

Normal value in fresh water	0,525	mg/l
Normal value in marine water	0,0525	mg/l
Normal value for fresh water sediment	2,36	mg/kg
Normal value for marine water sediment	0,236	mg/kg
Normal value for water, intermittent release	5,25	mg/l
Normal value of STP microorganisms	10	mg/l
Normal value for the terrestrial compartment	0,16	mg/kg

### Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers			Effects on workers				
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral				8,75 mg/kg bw/d				
Inhalation				33,8 mg/m3				270,5 mg/m3
Skin				16 mg/kg bw/d				44 mg/kg bw/d

### 1-METHOXY-2-PROPANOL

#### Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
AGW	DEU	370	100	740	200	
MAK	DEU	370	100	740	200	

**MARBEC S.R.L.**

Revision nr. 5

Dated 28/03/2022

**0035100 - SPOTLESS**

Printed on 28/03/2022

Page n. 7/22

Replaced revision:4 (Dated: 19/10/2020)

VLA	ESP	375	100	568	150	SKIN
VLEP	FRA	188	50	375	100	SKIN
VLEP	ITA	375	100	568	150	SKIN
VLE	PRT	375	100	568	150	
WEL	GBR	375	100	560	150	SKIN
OEL	EU	375	100	568	150	SKIN
TLV-ACGIH		184	50	368	100	

Health - Derived no-effect level - DNEL / DMEL								
Route of exposure	Effects on consumers			Effects on workers				
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral			VND	3,3 mg/kg bw/d				
Inhalation			VND	43,9 mg/m3	553,5 mg/m3	VND		369 mg/m3
Skin			VND	18,1 mg/kg bw/d		VND		50,6 mg/kg bw/d

**2-BUTOXYETHANOL**  
**Threshold Limit Value**

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
AGW	DEU	49	10	98 (C)	20 (C)	SKIN
MAK	DEU	49	10	98	20	SKIN Hinweis
VLA	ESP	98	20	245	50	SKIN
VLEP	FRA	49	10	246	50	SKIN
VLEP	ITA	98	20	246	50	SKIN
VLE	PRT	98	20	246	50	SKIN
WEL	GBR	123	25	246	50	SKIN
OEL	EU	98	20	246	50	SKIN
TLV-ACGIH		97	20			

Predicted no-effect concentration - PNEC		
Normal value in fresh water	8,8	mg/l
Normal value in marine water	0,88	mg/l
Normal value for fresh water sediment	34,6	mg/kg
Normal value for marine water sediment	3,46	mg/kg
Reference value for water, intermittent release	9,1	mg/l
Normal value of STP microorganisms	463	mg/l
Normal value for the food chain (secondary poisoning)	20	mg/kg
Normal value for the terrestrial compartment	2,33	mg/kg

Salute - Livello derivato di non effetto - DNEL / DMEL								
Route of exposure	Effects on consumers			Effects on workers				
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral		26,7 mg/kg bw/d		6,3 mg/kg bw/d				
Inhalation	147 mg/m3	426 mg/m3		59 mg/m3	246 mg/m3	1091 mg/m3		98 mg/m3
Skin				38 mg/kg bw/d				

**Sodium etasulphate**

Predicted no-effect concentration - PNEC

Normal value in fresh water	0,1357	mg/l
Normal value in marine water	0,01357	mg/l
Normal value for fresh water sediment	1,5	mg/kg
Normal value for marine water sediment	0,15	mg/kg
Normal value for water, intermittent release	4,83	mg/l
Normal value of STP microorganisms	1,35	mg/l
Normal value for the terrestrial compartment	0,22	mg/kg

**Health - Derived no-effect level - DNEL / DMEL**

Route of exposure	Effects on consumers			Effects on workers				
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral				24 mg/kg bw/d				
Inhalation				85 mg/m3				285 mg/m3
Skin				2440 mg/kg bw/d				4060 mg/kg bw/d

**POTASSIUM HYDROXIDE****Threshold Limit Value**

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
VLA	ESP	1		4		RESP
VLEP	FRA			2		
WEL	GBR			2		
TLV-ACGIH				2 (C)		

**Health - Derived no-effect level - DNEL / DMEL**

Route of exposure	Effects on consumers			Effects on workers				
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Inhalation			1 mg/m3				1 mg/m3	

**TRETASODIC N,N-BIS(CARBOXYLATOMETHYL)-L-GLUTAMATE**

Predicted no-effect concentration - PNEC

Normal value in fresh water	2	mg/l
Normal value in marine water	0,2	mg/l
Normal value for water, intermittent release	1	mg/l
Normal value of STP microorganisms	41,2	mg/l
Normal value for the food chain (secondary poisoning)	67	mg/kg

**Health - Derived no-effect level - DNEL / DMEL**

Route of exposure	Effects on consumers			Effects on workers				
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral				1,5 mg/kg/d				
Inhalation				1,8 mg/m3	55 mg/m3	55 mg/m3		7,3 mg/m3
Skin			VND	7500 mg/kg/d			VND	15000 mg/kg/d

**d-Limonene**

## Predicted no-effect concentration - PNEC

Normal value in fresh water	5,4	mg/l
Normal value in marine water	0,54	mg/l
Normal value for fresh water sediment	1,32	mg/kg
Normal value for marine water sediment	0,13	mg/kg
Normal value of STP microorganisms	1,8	mg/l
Normal value for the food chain (secondary poisoning)	3,33	mg/kg
Normal value for the terrestrial compartment	0,262	mg/kg

## Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers				Effects on workers			
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral			VND	4,76 mg/kg bw/d				
Inhalation			VND	8,33 mg/m3			VND	33,3 mg/m3
Skin	111 mg/cm2	VND			222 mg/cm2	VND		

Legend:

(C) = CEILING ; INHAL = Inhalable Fraction ; RESP = Respirable Fraction ; THORA = Thoracic Fraction.

VND = hazard identified but no DNEL/PNEC available ; NEA = no exposure expected ; NPI = no hazard identified.

## 8.2. Exposure controls

As the use of adequate technical equipment must always take priority over personal protective equipment, make sure that the workplace is well aired through effective local aspiration.

When choosing personal protective equipment, ask your chemical substance supplier for advice.

Personal protective equipment must be CE marked, showing that it complies with applicable standards.

Provide an emergency shower with face and eye wash station.

### HAND PROTECTION

Protect hands with category III work gloves (see standard EN 374).

The following should be considered when choosing work glove material: compatibility, degradation, failure time and permeability.

The work gloves' resistance to chemical agents should be checked before use, as it can be unpredictable. The gloves' wear time depends on the duration and type of use.

### SKIN PROTECTION

Wear category III professional long-sleeved overalls and safety footwear (see Regulation 2016/425 and standard EN ISO 20344). Wash body with soap and water after removing protective clothing.

### EYE PROTECTION

Wear a hood visor or protective visor combined with airtight goggles (see standard EN 166).

If there is a risk of splashing or splashing in connection with the work carried out, adequate protection of the mucous membranes (mouth, nose, eyes) should be provided to prevent accidental absorption.

### RESPIRATORY PROTECTION

If the threshold value (e.g. TLV-TWA) is exceeded for the substance or one of the substances present in the product, use a mask with a type A filter whose class (1, 2 or 3) must be chosen according to the limit of use concentration. (see standard EN 14387). In the presence of gases or vapours of various kinds and/or gases or vapours containing particulate (aerosol sprays, fumes, mists, etc.) combined filters are required.

Respiratory protection devices must be used if the technical measures adopted are not suitable for restricting the worker's exposure to the threshold values considered. The protection provided by masks is in any case limited.

If the substance considered is odourless or its olfactory threshold is higher than the corresponding TLV-TWA and in the case of an emergency, wear open-circuit compressed air breathing apparatus (in compliance with standard EN 137) or external air-intake breathing apparatus (in compliance with

standard EN 138). For a correct choice of respiratory protection device, see standard EN 529.

#### ENVIRONMENTAL EXPOSURE CONTROLS

The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.

Product residues must not be indiscriminately disposed of with waste water or by dumping in waterways.

## SECTION 9. Physical and chemical properties

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

Properties	Value	Information
Appearance	liquid	
Colour	light blue	
Odour	characteristic	
Melting point / freezing point	Not applicable	
Initial boiling point	Not available	
Flammability	incombustible	
Lower explosive limit	Not applicable	
Upper explosive limit	Not applicable	
Flash point	> 60 °C	
Auto-ignition temperature	Not available	
pH	12	
Kinematic viscosity	Not available	
Solubility	soluble in water	
Partition coefficient: n-octanol/water	Not available	
Vapour pressure	Not available	
Density and/or relative density	0,995 kg/l	
Relative vapour density	Not available	
Particle characteristics	Not applicable	

### 9.2. Other information

#### 9.2.1. Information with regard to physical hazard classes

Information not available

#### 9.2.2. Other safety characteristics

VOC (Directive 2010/75/EU)	22,61 % - 225,00 g/litre
Explosive properties	Not explosive
Oxidising properties	Not oxidizing

## SECTION 10. Stability and reactivity

### 10.1. Reactivity

There are no particular risks of reaction with other substances in normal conditions of use.

#### 10.2. Chemical stability

The product is stable in normal conditions of use and storage.

#### 10.3. Possibility of hazardous reactions

The vapours may also form explosive mixtures with the air.

#### 10.4. Conditions to avoid

Avoid exposure to: heat sources. Keep separate from: oxidizing agents, acids, flammable substances, halogens, organic substances. Keep away from: lead, aluminum, copper, tin, sulfur, bronze. It absorbs atmospheric CO<sub>2</sub>. Unstable when exposed to air. Freezing.

#### 10.5. Incompatible materials

1-METHOXY-2-PROPANOL

Incompatible with: oxidising substances, strong acids, alkaline metals.

#### 10.6. Hazardous decomposition products

In the event of thermal decomposition or fire, gases and vapours that are potentially dangerous to health may be released.

2-BUTOXYETHANOL

May develop: hydrogen.

POTASSIUM HYDROXIDE

May develop: flammable gases.

## SECTION 11. Toxicological information

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

##### Metabolism, toxicokinetics, mechanism of action and other information

Information not available

##### Information on likely routes of exposure

1-METHOXY-2-PROPANOL

WORKERS: inhalation; contact with the skin.

POPULATION: ingestion of contaminated food or water; inhalation of ambient air; contact with the skin of products containing the substance.

Delayed and immediate effects as well as chronic effects from short and long-term exposure**1-METHOXY-2-PROPANOL**

The main route of entry is the skin, whereas the respiratory route is less important due to the low vapour pressure of the product. Above 100 ppm causes irritation of the eye, nose and oropharynx mucous membranes. At 1000 ppm, disturbance of equilibrium and severe eye irritation can be noticed. Clinical and biological examinations carried out on exposed volunteers revealed no anomalies. Acetate produces greater skin and eye irritation with direct contact. No chronic effects on humans have been reported.

Interactive effects

Information not available

ACUTE TOXICITY

ATE (Inhalation - vapours) of the mixture:	> 20 mg/l
ATE (Oral) of the mixture:	>2000 mg/kg
ATE (Dermal) of the mixture:	Not classified (no significant component)

**Isotridecanol, ethoxylated (>5-20EO)**

LD50 (Oral):	> 5000 mg/kg
--------------	--------------

**3-BUTOXY-2-PROPANOL**

LD50 (Dermal):	> 2000 mg/kg Rat
LD50 (Oral):	3300 mg/kg Rat

**1-METHOXY-2-PROPANOL**

LD50 (Dermal):	> 2000 mg/kg Rabbit
LD50 (Oral):	4016 mg/kg Ratto
LC50 (Inhalation vapours):	> 7000 mg/l/4h Ratto

**Aliphatic alcohol ethoxylate 7 moles**

LD50 (Dermal):	> 2000 mg/kg coniglio
LD50 (Oral):	> 300 mg/kg ratto

**2-BUTOXYETHANOL**

LD50 (Oral):	> 2000 mg/kg Porcellino d'India (OECD - linea guida 402)
LC50 (Inhalation vapours):	> 1200 mg/kg Guinea pig
STA (Inhalation vapours):	3 mg/l/4h Rat

**OLEIC ACID**

LD50 (Oral):	> 2000 mg/kg ratto
--------------	--------------------

**Sodium etasulphate**

LD50 (Dermal): > 2000 mg/kg Ratto maschile, femminile  
LD50 (Oral): 2840 mg/kg Ratto maschile, femminile  
LC50 (Inhalation mists/powders): > 5 mg/l/4h Topo maschile, femminile

**POTASSIUM HYDROXIDE**

LD50 (Oral): 333 mg/kg Rat

**TRETASODIC N,N-BIS(CARBOXYLATOMETHYL)-L-GLUTAMATE**

LD50 (Dermal): > 2000 mg/kg OECD 402  
LD50 (Oral): > 2000 mg/kg ratto  
LC50 (Inhalation mists/powders): > 4,2 mg/l/4h OECD 403

**d-Limonene**

LD50 (Dermal): > 5000 mg/kg Coniglio  
LD50 (Oral): > 2000 mg/kg Metodo OECD 423 - Ratto (femmina)

**SKIN CORROSION / IRRITATION**

Corrosive for the skin

**SERIOUS EYE DAMAGE / IRRITATION**

Causes serious eye damage

**RESPIRATORY OR SKIN SENSITISATION**

May produce an allergic reaction

Contains:

d-Limonene

Sweet Brasil oil with orange

**Respiratory sensitization**

Information not available

**Skin sensitization**

Information not available

**GERM CELL MUTAGENICITY**

Does not meet the classification criteria for this hazard class

CARCINOGENICITY

Does not meet the classification criteria for this hazard class

REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class

Adverse effects on sexual function and fertility

Information not available

Adverse effects on development of the offspring

Information not available

Effects on or via lactation

Information not available

STOT - SINGLE EXPOSURE

Does not meet the classification criteria for this hazard class

Target organs

Information not available

Route of exposure

Information not available

STOT - REPEATED EXPOSURE

Does not meet the classification criteria for this hazard class

Target organs

Information not available

Route of exposure

Information not available

ASPIRATION HAZARD

Does not meet the classification criteria for this hazard class

**11.2. Information on other hazards**

Based on the available data, the product does not contain substances listed in the main European lists of potential or suspected endocrine disruptors with human health effects under evaluation.

**SECTION 12. Ecological information**

This product is dangerous for the environment and the aquatic organisms. In the long term, it have negative effects on aquatic environment.

**12.1. Toxicity****1-METHOXY-2-PROPANOL**

The product is probably not harmful to aquatic organisms. The correct introduction of low concentrations into the biological purification plant should not compromise the degradation activity of the activated sludge.

**2-BUTOXYETHANOL**

Aquatic toxicity assessment (supplier): The product is not likely to be harmful to aquatic organisms. There is a high probability that the product is not chronically harmful to aquatic organisms. The correct introduction of low concentrations into the biological purification plant should not compromise the degradation activity of the activated sludge. Terrestrial toxicity assessment (supplier): scientifically not justified study.

**2-BUTOXYETHANOL**

LC50 - for Fish	1474 mg/l/96h oncorhynchus mykiss
EC50 - for Crustacea	1550 mg/l/48h daphnia magna
EC50 - for Algae / Aquatic Plants	1840 mg/l/72h pseudokirchneriella subcapitata
Chronic NOEC for Fish	> 100 mg/l brachydanio rerio
Chronic NOEC for Crustacea	100 mg/l daphnia magna

**1-METHOXY-2-PROPANOL**

LC50 - for Fish	> 6800 mg/l/96h leuciscus idus
EC50 - for Crustacea	23300 mg/l/48h daphnia magna
d-Limonene	
LC50 - for Fish	> 0,72 mg/l/96h
EC50 - for Crustacea	0,85 mg/l/424h Daphnia magna
EC50 - for Algae / Aquatic Plants	0,32 mg/l/72h Pseudokirchneriella subcapitata
Aliphatic alcohol ethoxylate 7 moles	
LC50 - for Fish	5 mg/l/96h
EC50 - for Crustacea	5 mg/l/48h
EC50 - for Algae / Aquatic Plants	5 mg/l/72h
Chronic NOEC for Algae / Aquatic Plants	10 mg/kg Metodo OECD 208
Isotridecanol, ethoxylated (>5-20EO)	
EC50 - for Crustacea	5 mg/l/48h
EC50 - for Algae / Aquatic Plants	5 mg/l/72h
EC10 for Algae / Aquatic Plants	2500 mg/17h
Sodium etasulphate	
LC50 - for Fish	> 100 mg/l/96h
EC50 - for Crustacea	483 mg/l/48h Dafnia
EC50 - for Algae / Aquatic Plants	> 511 mg/l/72h Allghe
Chronic NOEC for Fish	> 1357 mg/l 42 giorni Flow-through
Chronic NOEC for Crustacea	1,4 mg/l 21 giorni Semi-staic Dafnia
TRETASODIC BIS(CARBOXYLATOMETHYL)-L- GLUTAMATE	N,N-
LC50 - for Fish	> 100 mg/l/96h oncorhynchus mykiss
EC50 - for Crustacea	> 100 mg/l/48h daphnia magna
EC50 - for Algae / Aquatic Plants	> 100 mg/l/72h demsodemus supspicatus, OECD 201
Chronic NOEC for Algae / Aquatic Plants	> 100 mg/l OECD 201

## 12.2. Persistence and degradability

### 1-METHOXY-2-PROPANOL

Evaluation of biodegradability and elimination (H<sub>2</sub>O): easily biodegradable (according to OECD criteria). Disposal considerations: 90-100% (28 days) (OECD 301E/92/96/EEC, C 4-B) (aerobic, municipal water treatment plant effluent). In water, hydrolytic stability was not determined but rapid biodegradability was found (96% degraded in 28 days). OECD 301E test. Atmospheric vapour rapidly photodegraded (half-life <1 day)

### POTASSIUM HYDROXIDE

Solubility in water > 10000 mg/l

Degradability: information not available

### 3-BUTOXY-2-PROPANOL

Solubility in water 52000 mg/l

Rapidly degradable

2-BUTOXYETHANOL

Solubility in water 1000 - 10000 mg/l

Rapidly degradable

1-METHOXY-2-PROPANOL

Solubility in water 1000 - 10000 mg/l

Rapidly degradable

d-Limonene

Rapidly degradable

Aliphatic alcohol ethoxylate 7 moles

Rapidly degradable

Isotridecanol, ethoxylated (>5-20EO)

Rapidly degradable

Sodium etasulphate

Rapidly degradable

TRETASODIC N,N-  
BIS(CARBOXYLATOMETHYL)-L-  
GLUTAMATE

Rapidly degradable

### 12.3. Bioaccumulative potential

3-BUTOXY-2-PROPANOL

Partition coefficient: n-octanol/water 1,2

2-BUTOXYETHANOL

Partition coefficient: n-octanol/water 0,81

BCF 3,16 (calculated QSAR value). This substance is not expected to bioaccumulate

1-METHOXY-2-PROPANOL

Partition coefficient: n-octanol/water < 1

Sodium etasulphate

BCF < 73

### 12.4. Mobility in soil

2-BUTOXYETHANOL

Transport evaluation between environmental departments (supplier): the substance does not evaporate into the atmosphere from the water surface. Absorption at solid phase of soil is not predictable. Scientifically unjustified study. Stability in water: Immediate hydrolysis is not expected; it does not contain functional groups for which it is believed that they can be hydrolysed in water. Stability in soil: low absorption in soil particles expected.

### 12.5. Results of PBT and vPvB assessment

On the basis of available data, the product does not contain any PBT or vPvB in percentage  $\geq$  than 0,1%.

**12.6. Endocrine disrupting properties**

Based on the available data, the product does not contain substances listed in the main European lists of potential or suspected endocrine disruptors with environmental effects under evaluation.

**12.7. Other adverse effects**

Information not available

**SECTION 13. Disposal considerations****13.1. Waste treatment methods**

Reuse, when possible. Product residues should be considered special hazardous waste. The hazard level of waste containing this product should be evaluated according to applicable regulations.

Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations.

CONTAMINATED PACKAGING

Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

**SECTION 14. Transport information**

The product is not dangerous under current provisions of the Code of International Carriage of Dangerous Goods by Road (ADR) and by Rail (RID), of the International Maritime Dangerous Goods Code (IMDG), and of the International Air Transport Association (IATA) regulations.

**14.1. UN number or ID number**

Not applicable

**14.2. UN proper shipping name**

Not applicable

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

Not applicable

**14.4. Packing group**

Not applicable

**14.5. Environmental hazards**

Not applicable

**14.6. Special precautions for user**

Not applicable

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

Information not relevant

**SECTION 15. Regulatory information****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

Seveso Category - Directive 2012/18/EU: None

Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006Product

Point 3 - 40

Contained substance

Point 75

Regulation (EU) 2019/1148 - on the marketing and use of explosives precursors

Not applicable

Substances in Candidate List (Art. 59 REACH)On the basis of available data, the product does not contain any SVHC in percentage  $\geq$  than 0,1%.Substances subject to authorisation (Annex XIV REACH)

None

Substances subject to exportation reporting pursuant to Regulation (EU) 649/2012:

None

Substances subject to the Rotterdam Convention:

None

Substances subject to the Stockholm Convention:

None

Healthcare controls

Workers exposed to this chemical agent must not undergo health checks, provided that available risk-assessment data prove that the risks related to the workers' health and safety are modest and that the 98/24/EC directive is respected.

### 15.2. Chemical safety assessment

A chemical safety assessment has been prepared for the following substances in the mixture:  
1-methoxy 2-propanol, potassium iodide, 2-butoxyethanol, 3-butoxy-2-propanol, d-limonene

## SECTION 16. Other information

Text of hazard (H) indications mentioned in section 2-3 of the sheet:

<b>Flam. Liq. 3</b>	Flammable liquid, category 3
<b>Met. Corr. 1</b>	Substance or mixture corrosive to metals, category 1
<b>Acute Tox. 3</b>	Acute toxicity, category 3
<b>Acute Tox. 4</b>	Acute toxicity, category 4
<b>Asp. Tox. 1</b>	Aspiration hazard, category 1
<b>Skin Corr. 1A</b>	Skin corrosion, category 1A
<b>Eye Dam. 1</b>	Serious eye damage, category 1
<b>Skin Sens. 1</b>	Skin sensitization, category 1
<b>STOT SE 3</b>	Specific target organ toxicity - single exposure, category 3
<b>Aquatic Chronic 1</b>	Hazardous to the aquatic environment, chronic toxicity, category 1
<b>Aquatic Chronic 3</b>	Hazardous to the aquatic environment, chronic toxicity, category 3
<b>H226</b>	Flammable liquid and vapour.
<b>H290</b>	May be corrosive to metals.
<b>H331</b>	Harmful if inhaled.
<b>H302</b>	Harmful if swallowed.
<b>H304</b>	May be fatal if swallowed and enters airways.
<b>H314</b>	Causes severe skin burns and eye damage.
<b>H318</b>	Causes serious eye damage.
<b>H317</b>	May cause an allergic skin reaction.
<b>H336</b>	May cause drowsiness or dizziness.
<b>H410</b>	Very toxic to aquatic life with long lasting effects.
<b>H412</b>	Harmful to aquatic life with long lasting effects.

**LEGEND:**

- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- ATE: Acute Toxicity Estimate
- CAS: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE: Identifier in ESIS (European archive of existing substances)

- CLP: Regulation (EC) 1272/2008
- DNEL: Derived No Effect Level
- EmS: Emergency Schedule
- GHS: Globally Harmonized System of classification and labeling of chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulation
- IC50: Immobilization Concentration 50%
- IMDG: International Maritime Code for dangerous goods
- IMO: International Maritime Organization
- INDEX: Identifier in Annex VI of CLP
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PBT: Persistent bioaccumulative and toxic as REACH Regulation
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PNEC: Predicted no effect concentration
- REACH: Regulation (EC) 1907/2006
- RID: Regulation concerning the international transport of dangerous goods by train
- TLV: Threshold Limit Value
- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TWA: Time-weighted average exposure limit
- TWA STEL: Short-term exposure limit
- VOC: Volatile organic Compounds
- vPvB: Very Persistent and very Bioaccumulative as for REACH Regulation
- WGK: Water hazard classes (German).

**GENERAL BIBLIOGRAPHY**

1. Regulation (EC) 1907/2006 (REACH) of the European Parliament
  2. Regulation (EC) 1272/2008 (CLP) of the European Parliament
  3. Regulation (EU) 2020/878 (II Annex of REACH Regulation)
  4. Regulation (EC) 790/2009 (I Atp. CLP) of the European Parliament
  5. Regulation (EU) 286/2011 (II Atp. CLP) of the European Parliament
  6. Regulation (EU) 618/2012 (III Atp. CLP) of the European Parliament
  7. Regulation (EU) 487/2013 (IV Atp. CLP) of the European Parliament
  8. Regulation (EU) 944/2013 (V Atp. CLP) of the European Parliament
  9. Regulation (EU) 605/2014 (VI Atp. CLP) of the European Parliament
  10. Regulation (EU) 2015/1221 (VII Atp. CLP) of the European Parliament
  11. Regulation (EU) 2016/918 (VIII Atp. CLP) of the European Parliament
  12. Regulation (EU) 2016/1179 (IX Atp. CLP)
  13. Regulation (EU) 2017/776 (X Atp. CLP)
  14. Regulation (EU) 2018/669 (XI Atp. CLP)
  15. Regulation (EU) 2019/521 (XII Atp. CLP)
  16. Delegated Regulation (UE) 2018/1480 (XIII Atp. CLP)
  17. Regulation (EU) 2019/1148
  18. Delegated Regulation (UE) 2020/217 (XIV Atp. CLP)
  19. Delegated Regulation (UE) 2020/1182 (XV Atp. CLP)
  20. Delegated Regulation (UE) 2021/643 (XVI Atp. CLP)
  21. Delegated Regulation (UE) 2021/849 (XVII Atp. CLP)
- The Merck Index. - 10th Edition
  - Handling Chemical Safety
  - INRS - Fiche Toxicologique (toxicological sheet)
  - Patty - Industrial Hygiene and Toxicology
  - N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition
  - IFA GESTIS website
  - ECHA website
  - Database of SDS models for chemicals - Ministry of Health and ISS (Istituto Superiore di Sanità) - Italy

**Note for users:**

The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product.

This document must not be regarded as a guarantee on any specific product property.

The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.

Provide appointed staff with adequate training on how to use chemical products.

**CALCULATION METHODS FOR CLASSIFICATION**

Chemical and physical hazards: Product classification derives from criteria established by the CLP Regulation, Annex I, Part 2. The data for evaluation of chemical-physical properties are reported in section 9.

Health hazards: Product classification is based on calculation methods as per Annex I of CLP, Part 3, unless determined otherwise in Section 11.

Environmental hazards: Product classification is based on calculation methods as per Annex I of CLP, Part 4, unless determined otherwise in Section 12.

Changes to previous review:

The following sections were modified:

03 / 11 / 16.