

Safety Data Sheet

According to Annex II to REACH - Regulation 2015/830

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

1.1. Product identifier

Code: DRAP252
Product name: SILOXAN V

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

Intended use: SINGLE-COMPONENT WATER-REPELLENT WATERPROOFING FOR CONCRETE AND STONE MATERIALS

Identified Uses	Industrial	Professional	Consumer
Use in coatings	-	✓	-

Uses Advised Against

Do not use for uses other than those indicated.

1.3. Details of the supplier of the safety data sheet

Name: DRACO ITALIANA S.p.A.
Full address: Via Monte Grappa, 11 D-E
District and Country: 20067 Tribiano (MI)
Italia
Tel. +39 02.90632917
Fax +39 02.90631976

e-mail address of the competent person

responsible for the Safety Data Sheet: info@draco-edilizia.it

1.4. Emergency telephone number

For urgent inquiries refer to

Centro Antiveleni di Bergamo 800883300 (Azienda Ospedaliera Papa Giovanni XXII)
Centro Antiveleni di Firenze 0557947819 (Az. Osp. "Careggi" U.O. Tossicologia Medica)
Centro Antiveleni di Foggia 80018345 (Az. Osp. Univ. Foggia)
Centro Antiveleni di Milano 0266101029 (Osp. Niguarda Ca' Granda)
Centro Antiveleni di Napoli 0817472870 (Az. Osp. "A. Cardarelli")
Centro Antiveleni di Pavia 038224444 (CAV Centro Nazionale di Informazione Tossicologica)
Centro Antiveleni di Roma 063054343 (CAV Policlinico "A. Gemelli")
Centro Antiveleni di Roma 0649978000 (CAV Policlinico "Umberto I")
Centro Antiveleni di Roma 06 68593726 (CAV "Osp. Pediatrico Bambino Gesù"
Dip. Emergenza e Accettazione DEA)

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 2015/830. 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:

Flammable liquid, category 2	H225	Highly flammable liquid and vapour.
Aspiration hazard, category 1	H304	May be fatal if swallowed and enters airways.
Eye irritation, category 2	H319	Causes serious eye irritation.
Skin irritation, category 2	H315	Causes skin irritation.
Specific target organ toxicity - single exposure, category 3	H336	May cause drowsiness or dizziness.

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:

H225	Highly flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H319	Causes serious eye irritation.
H315	Causes skin irritation.
H336	May cause drowsiness or dizziness.

Precautionary statements:

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P331	Do NOT induce vomiting.
P280	Wear protective gloves/ protective clothing / eye protection / face protection.
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER / doctor / . . .
P261	Avoid breathing dust / fume / gas / mist / vapours / spray.
P233	Keep container tightly closed.
P403+P235	Store in a well-ventilated place. Keep cool.

Contains: Acetone
 Xilene, miscela di isomeri
 ETHYLBENZENE

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%.

SECTION 3. Composition/information on ingredients

3.2. Mixtures

Contains:

Identification	x = Conc. %	Classification 1272/2008 (CLP)
Acetone		

CAS 67-64-1	$75 \leq x < 85$	Flam. Liq. 2 H225, Eye Irrit. 2 H319, STOT SE 3 H336, EUH066
EC 200-662-2		
INDEX 606-001-00-8		
Reg. no. 01-2119471330-49-XXXX		
Xilene, miscela di isomeri		
CAS 1330-20-7	$4 \leq x < 6$	Flam. Liq. 3 H226, Acute Tox. 4 H312, Acute Tox. 4 H332, Asp. Tox. 1 H304, Eye Irrit. 2 H319, Skin Irrit. 2 H315, STOT SE 3 H335, Aquatic Chronic 3 H412
EC 215-535-7		
INDEX 601-022-00-9		
Reg. no. 01-2119488216-32-XXXX		
2-BUTOXYETHANOL		
CAS 111-76-2	$1 \leq x < 2,5$	Acute Tox. 4 H302, Acute Tox. 4 H312, Acute Tox. 4 H332, Eye Irrit. 2 H319, Skin Irrit. 2 H315
EC 203-905-0		
INDEX 603-014-00-0		
ETHYLBENZENE		
CAS 100-41-4	$1 \leq x < 2,5$	Flam. Liq. 2 H225, Acute Tox. 4 H332, Asp. Tox. 1 H304, STOT RE 2 H373, Aquatic Chronic 3 H412
EC 202-849-4		
INDEX 601-023-00-4		
Reg. no. 01-2119489370-35-XXXX		
Xilene, miscela di isomeri		
CAS 1330-20-7	$1 \leq x < 2$	Flam. Liq. 3 H226, Acute Tox. 4 H312, Acute Tox. 4 H332, Asp. Tox. 1 H304, STOT RE 2 H373, Eye Irrit. 2 H319, Skin Irrit. 2 H315, STOT SE 3 H335, Aquatic Chronic 3 H412
EC 215-535-7		
INDEX 601-022-00-9		
Reg. no. 01-2119488216-32-XXXX		
ETHYL SILICATE		
CAS 78-10-4	$0,5 \leq x < 0,8$	Flam. Liq. 3 H226, Acute Tox. 4 H332, Eye Irrit. 2 H319, STOT SE 3 H335
EC 201-083-8		
INDEX 014-005-00-0		
Reg. no. 01-2119496195-28-0003		
METANOLO		
CAS 67-56-1	$0,05 \leq x < 0,07$	Flam. Liq. 2 H225, Acute Tox. 3 H301, Acute Tox. 3 H311, Acute Tox. 3 H331, STOT SE 1 H370
EC 200-659-6		
INDEX 603-001-00-X		

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 15 minutes, opening the eyelids fully. If problem persists, seek medical advice.

SKIN: Remove contaminated clothing. Rinse skin with a shower immediately. Get medical advice/attention immediately. Wash contaminated clothing before using it again.

INHALATION: Remove to open air. If the subject stops breathing, administer artificial respiration. Get medical advice/attention immediately.

INGESTION: Get medical advice/attention immediately. Do not induce vomiting. Do not administer anything not explicitly authorised by a doctor.

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

See sections 2 and 11

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

Symptomatic treatment

SECTION 5. Firefighting measures**5.1. Extinguishing media**

SUITABLE EXTINGUISHING EQUIPMENT

Extinguishing substances are: carbon dioxide, foam, chemical powder. For product loss or leakage that has not caught fire, water spray can be used to disperse flammable vapours and protect those trying to stem the leak.

UNSUITABLE EXTINGUISHING EQUIPMENT

Do not use jets of water. Water is not effective for putting out fires but can be used to cool containers exposed to flames to prevent explosions.

5.2. Special hazards arising from the substance or mixture

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE

Excess pressure may form in containers exposed to fire at a risk of explosion. Do not breathe combustion products.

5.3. Advice for firefighters

GENERAL INFORMATION

Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations.

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.

Send away individuals who are not suitably equipped. Use explosion-proof equipment. Eliminate all sources of ignition (cigarettes, flames, sparks, etc.) from the leakage site.

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**

Keep away from heat, sparks and naked flames; do not smoke or use matches or lighters. Without adequate ventilation, vapours may accumulate at ground level and, if ignited, catch fire even at a distance, with the danger of backfire. Avoid bunching of electrostatic charges. When performing transfer operations involving large containers, connect to an earthing system and wear antistatic footwear. Vigorous stirring and flow through the tubes and equipment may cause the formation and accumulation of electrostatic charges. In order to avoid the risk of fires and explosions, never use compressed air when handling. Open containers with caution as they may be pressurised. Do not eat, drink or smoke during 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 the containers sealed, in a well ventilated place, away from direct sunlight. Store in a cool and well ventilated place, keep far away from sources of heat, naked flames and sparks and other sources of ignition. Keep containers away from any incompatible materials, see section 10 for details.

7.3. Specific end use(s)

Information not available

SECTION 8. Exposure controls/personal protection

8.1. Control parameters

Regulatory References:

FRA	France	Valeurs limites d'exposition professionnelle aux agents chimiques en France. ED 984 - INRS
ITA	Italia	Decreto Legislativo 9 Aprile 2008, n.81
GBR	United Kingdom	EH40/2005 Workplace exposure limits (Third edition, published 2018)
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 2019

Acetone

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m ³	ppm	mg/m ³	ppm	
VLEP	FRA	1210	500	2420	1000	
VLEP	ITA	1210	500			
WEL	GBR	1210	500	3620	1500	
OEL	EU	1210	500			
TLV-ACGIH		250	594	1187	500	irr oclr, TRS, ssnc

Predicted no-effect concentration - PNEC

Normal value in fresh water	10,6	mg/l
Normal value in marine water	1,06	mg/l
Normal value for fresh water sediment	30,4	mg/kg/d
Normal value for marine water sediment	3,04	mg/kg/d
Normal value for water, intermittent release	21	mg/l
Normal value of STP microorganisms	100	mg/l
Normal value for the terrestrial compartment	29,5	mg/kg/d

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						62 mg/kg bw/d		
Inhalation				200 mg/m ³	2420 mg/m ³			1210 mg/m ³
Skin				62 mg/kg bw/d				186 mg/kg bw/d

Xilene, miscela di isomeri

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m ³	ppm	mg/m ³	ppm	
VLEP	FRA	221	50	442	100	SKIN

DRACO ITALIANA S.p.A.

Revision nr. 3

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Replaced revision:2 (Dated: 25/03/2021)

VLEP	ITA	221	50	442	100	
WEL	GBR	220	50	441	100	SKIN
OEL	EU	221	50	442	100	SKIN
TLV-ACGIH		434	100	651	150	

Predicted no-effect concentration - PNEC

Normal value in fresh water	0,327	mg/l
Normal value in marine water	0,327	mg/l
Normal value for fresh water sediment	12,46	mg/kg
Normal value for marine water sediment	12,46	mg/kg
Normal value for water, intermittent release	0,327	mg/l
Normal value of STP microorganisms	6,58	mg/l
Normal value for the terrestrial compartment	2,31	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
Inhalation					442 mg/m3	442 mg/m3	221 mg/m3	221 mg/m3

ETHYLBENZENE

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
VLEP	FRA	88,4	20	442	100	SKIN
VLEP	ITA	442	100	884	200	SKIN
WEL	GBR	441	100	552	125	SKIN
OEL	EU	442	100	884	200	SKIN
TLV-ACGIH		87	20			

Predicted no-effect concentration - PNEC

Normal value in fresh water	0,1	mg/l
Normal value in marine water	0,01	mg/l
Normal value for fresh water sediment	13,7	mg/kg
Normal value for marine water sediment	1,37	mg/kg
Normal value for water, intermittent release	0,1	mg/l
Normal value of STP microorganisms	9,6	mg/l
Normal value for the terrestrial compartment	2,68	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				1,6 mg/kg bw/d				
Inhalation				15 mg/m3	293 mg/m3			77 mg/m3
Skin								180 mg/kg/d

2-BUTOXYETHANOL

Threshold Limit Value

Type	Country	TWA/8h	STEL/15min	Remarks / Observations
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		mg/m3	ppm	mg/m3	ppm	
VLEP	FRA	49	10	246	50	SKIN
VLEP	ITA	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
Normal value for water, intermittent release				9,1		mg/l
Normal value of STP microorganisms				463		mg/l
Normal value for the terrestrial compartment				2,33		mg/kg/d

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		26,7 mg/kg bw/d		6,3 mg/kg bw/d				
Inhalation	147 mg/m3	426 mg/m3	147 mg/m3	59 mg/m3	246 mg/m3	1091 mg/m3		98 mg/m3
Skin		89 mg/kg bw/d		75 mg/kg bw/d		89 mg/kg bw/d		125 mg/kg bw/d

Xilene, miscela di isomeri

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
VLEP	FRA	221	50	442	100	SKIN
VLEP	ITA	221	50	442	100	
WEL	GBR	220	50	441	100	SKIN
OEL	EU	221	50	442	100	SKIN
TLV-ACGIH		434	100	651	150	

Predicted no-effect concentration - PNEC

Normal value in fresh water				0,327		mg/l
Normal value in marine water				0,327		mg/l
Normal value for fresh water sediment				12,46		mg/kg
Normal value for marine water sediment				12,46		mg/kg
Normal value of STP microorganisms				6,58		mg/l
Normal value for the terrestrial compartment				2,31		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				12,5 mg/kg bw/d				
Inhalation	174	260 mg/m3		65,3 mg/m3	442	442 mg/m3		180 mg/m3
Skin				108				3182 mg/kg bw/d

ETHYL SILICATE**Threshold Limit Value**

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
VLEP	FRA	85	10			
VLEP	ITA	44	5			
WEL	GBR	44	5			
OEL	EU	44	5			
TLV-ACGIH		85	10			

METANOLO**Threshold Limit Value**

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
VLEP	FRA	260	200	1300	1000	SKIN 11
VLEP	ITA	260	200			SKIN
WEL	GBR	266	200	333	250	SKIN
OEL	EU	260	200			
TLV-ACGIH		262	200	328	250	SKIN

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.

Acetone

Biological index of exposure:

Components with biological limit values: CAS: 67-64-1 acetone

IBE (ACGIH 2019) 25 mg / l

Samples: urine

Time of withdrawal: at the end of the shift

Biological indicator: acetone

Notes: the biological indicator is not specific, since it is also possible to detect its presence after exposure to other chemicals.

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 II 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.

Consider the appropriateness of providing antistatic clothing in the case of working environments in which there is a risk of explosion.

EYE PROTECTION

Wear airtight protective goggles (see standard EN 166).

RESPIRATORY PROTECTION

If the threshold value (e.g. TLV-TWA) is exceeded for the substance or one of the substances present in the product, wear a mask with a type AX filter, whose limit of use will be defined by the manufacturer (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.

Acetone**Respiratory protection:**

for short exposures or in the event of an accident: filter devices, type AX (EN 371). Having a breathing apparatus that does not depend on circulating air ready for emergencies.

Hand protection:

protective gloves compliant with EN 374.

Glove material: butyl rubber (butyl rubber) - layer thickness >= 0.5 mm.

Breakthrough time: > 480 min.

Observe the glove manufacturer's instructions regarding penetrability and breakthrough time.

Eye protection:

hermetically sealed safety goggles according to EN 166.

Body protection:

use solvent resistant protective clothing.

Recommendation:

flame retardant, antistatic protective clothing. safety shoes according to EN 345-347.

General protection and hygiene measures

Wash hands before breaks and after work. Avoid contact with skin and eyes. Do not eat, drink or smoke during use. Have an eye wash bottle or eye rinse ready at work.

Alternatives to the following personal protective measures can only be determined in consultation with a responsible safety expert.

XYLENE (MIXTURE OF ISOMERS)

Protect your hands with nitrile latex gloves compliant with EN 374-1: 2016.

SECTION 9. Physical and chemical properties**9.1. Information on basic physical and chemical properties**

Appearance	liquid
Colour	colourless
Odour	solvent
Odour threshold	Not determined
pH	Not determined
Melting point / freezing point	Not determined
Initial boiling point	> 35 °C
Boiling range	Not determined
Flash point	< 23 °C
Evaporation rate	Not determined
Flammability (solid, gas)	not applicable
Lower inflammability limit	Not available
Upper inflammability limit	Not available

Lower explosive limit	Not available
Upper explosive limit	Not available
Vapour pressure	Not determined
Vapour density	Not determined
Relative density	0,800 - 0,990 g/cc
Solubility	immiscible
Partition coefficient: n-octanol/water	Not determined
Auto-ignition temperature	Not determined
Decomposition temperature	Not determined
Viscosity	Not determined
Explosive properties	not determined
Oxidising properties	not determined

9.2. Other information

VOC (Directive 2010/75/EC) :	94,22 % - 769,72 g/litre
VOC (volatile carbon) :	60,47 % - 494,01 g/litre

SECTION 10. Stability and reactivity

10.1. Reactivity

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

2-BUTOXYETHANOL

Decomposes under the effect of heat.

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.

Acetone

Risk of explosion on contact with: bromine trifluoride, fluorine dioxide, hydrogen peroxide, nitrosyl chloride, 2-methyl-1,3-butadiene, nitromethane, nitrosyl perchlorate. May react dangerously with: potassium tert-butoxide, alkaline hydroxides, bromine, bromoform, isoprene, sodium, sulfur dioxide, chromium trioxide, cromyl chloride, nitric acid, chloroform, peroxymonosulfuric acid, phosphorus oxychloride, chromosulfuric acid, fluorine, strong oxidizing agents, strong reducing agents. Develop flammable gases in contact with: nitrosyl perchlorate.

XYLENE (MIXTURE OF ISOMERS)

Stable under normal conditions of use and storage Reacts violently with: strong oxidants, strong acids, acid nitric, perchlorates. May form explosive mixtures with: air.

ETHYLBENZENE

Reacts violently with: strong oxidants. Attacks various types of plastic materials. May form explosive mixtures with: air.

2-BUTOXYETHANOL

May react dangerously with: aluminium, oxidising agents. Forms peroxides with: air.

10.4. Conditions to avoid

Avoid overheating. Avoid bunching of electrostatic charges. Avoid all sources of ignition.

Acetone

Avoid exposure to: heat sources, open flames.

2-BUTOXYETHANOL

Avoid exposure to: sources of heat, naked flames.

10.5. Incompatible materials

Acetone

Incompatible with: acids, oxidizing substances.

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.

Acetone

It can develop: ketene, irritants.

ETHYLBENZENE

May develop: methane, styrene, hydrogen, ethane.

2-BUTOXYETHANOL

May develop: hydrogen.

SECTION 11. Toxicological information

11.1. Information on toxicological effects

ETHYL SILICATE

Effetti acuti:

Effetti fortemente irritativi dei vapori concentrati e della sostanza liquida sulle mucose e sulla pelle.

Effetti cronici:

Oltre alle indicazioni di effetti irritativi, non sono disponibili informazioni specifiche sulla sostanza nell'uomo.

Metabolism, toxicokinetics, mechanism of action and other information

Acetone

Acetone appears in the human and mammalian organisms as an endogenous product of normal metabolism with considerably increased levels during altered physiological states.

Acetone from dermal, inhaled and oral exposure is rapidly absorbed. Relative airway absorption was approximately 50% in humans. It passes into the blood within a few minutes. Acetone is not selectively absorbed into any tissue but is more evenly distributed in body water.

The metabolic fate of exogenous acetone is independent of the pathway of absorption and involves three separate low-dose gluconeogenic pathways with acetol (1-hydroxyacetone), methylglyoxal and 1,2-propanediol as intermediates. Both methylglyoxal and propanediol are oxidized to pyruvate, which is the basic component for the biosynthesis of many endogenous biochemicals. At high doses, an alternating metabolic pathway appears with cleavage of 1,2-propanediol to acetate and formate. The elimination of acetone is effective even at high internal doses and occurs through metabolic transformation to endogenous biochemical substances, such as acetone vapor through the airways and skin surface, through the exhalation of CO₂ and into the urine as acetone or acetol, methylglyoxal or as D-lactoyl-GSH. The acetone turnover rates were linear up to a plasma concentration of 5 mM (260 mg / L) with a turnover rate of ca. 9 μmol / kg bw / min = approx. 0.52 mg / kg of body weight / minute corresponding to a daily turnover of 750 mg / kg of body weight / day. Studies with repeated daily exposures of 6 or 8 hours have confirmed that bioaccumulation is not expected to occur until approx. 1,000 ppm (approximately 2,400 mg / m³ for 8 h / day 5 d / w) in humans and during 14 days of daily exposure in rats up to 11,000 ppm (26,550 mg / m³). For oral application to rats as a single bolus by gavage, the elimination of acetone appears to be saturated when blood levels rise above 300-400 mg / L corresponding to a dose of approximately 200 mg / kg body weight.

Source ECHA

Information on likely routes of exposure

XYLENE (MIXTURE OF ISOMERS)

WORKERS: inhalation; contact with the skin.

POPULATION: ingestion of contaminated food or water; inhalation of ambient air.

ETHYLBENZENE

WORKERS: inhalation; contact with the skin.

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

METHANOL

WORKERS: inhalation; contact with the skin.

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

Delayed and immediate effects as well as chronic effects from short and long-term exposure**ETHYLBENZENE**

As the counterparts of benzene, may have an acute effect on the central nervous system, with depression, narcosis, often preceded by dizziness and associated with headache (Ispesl). Is irritating for skin, conjunctiva and respiratory tract.

XYLENE (MIXTURE OF ISOMERS)

Toxic action on the central nervous system (encephalopathies); irritant action on the skin, conjunctiva, cornea and respiratory system.

METHANOL

The minimum lethal dose to humans by ingestion is considered in the range from 300 to 1000 mg / kg. Ingestion of 4-10 ml of the substance can cause permanent blindness (IPCS) in adult humans.

Interactive effects**XYLENE (MIXTURE OF ISOMERS)**

Alcohol intake interferes with the metabolism of the substance, inhibiting it. Consumption of ethanol (0.8 g / kg) before 4-hour exposure to xylenes vapors (145 and 280 ppm) causes a 50% decrease in metilippuric acid excretion, while the blood concentration of xylenes rises about 1.5-2 times. At the same time there is an increase in side effects secondary to ethanol. The metabolism of xylenes is enhanced by phenobarbital and 3-methyl-colanthrene-type enzyme inducers. Aspirin and xylenes mutually inhibit their conjugation with glycine, which results in a decrease urinary excretion of metilippuric acid. Other industrial products can interfere with the metabolism of xylenes.

ACUTE TOXICITY

ATE (Inhalation) of the mixture:

> 20 mg/l

ATE (Oral) of the mixture:

>2000 mg/kg

ATE (Dermal) of the mixture:

>2000 mg/kg

Xilene, miscela di isomeri

LD50 (Oral) 3523 mg/kg Ratto

LD50 (Dermal) 4350 mg/kg Coniglio

LC50 (Inhalation) 26 mg/l/4h Ratto

Xilene, miscela di isomeri

LD50 (Oral) 3523 mg/kg Ratto

LD50 (Dermal) 2000 mg/kg Coniglio

LC50 (Inhalation) 27,541 mg/l/4h Ratto

METANOLO

LD50 (Oral) 100 mg/kg Ratto

LD50 (Dermal) 300 mg/kg Ratto

LC50 (Inhalation) 3 mg/l/4h Ratto

ETHYLBENZENE

LD50 (Oral) 3500 mg/kg Rat

LD50 (Dermal) 15354 mg/kg Rabbit

LC50 (Inhalation) 17,2 mg/l/4h Rat

2-BUTOXYETHANOL

LD50 (Oral) 1300 mg/kg Rat

LD50 (Dermal) > 2000 mg/kg Rabbit

LC50 (Inhalation) 450 ppm/4h Rat

Acetone

LD50 (Oral) 5800 mg/kg Rat

LD50 (Dermal) 7426 mg/kg Rat

LC50 (Inhalation) 76 mg/l/4h Rabbit

ETHYL SILICATE

LC50 (Inhalation) 1,5 mg/l Conversion into point estimate of acute toxicity

SKIN CORROSION / IRRITATION

Causes skin irritation

SERIOUS EYE DAMAGE / IRRITATION

Causes serious eye irritation

RESPIRATORY OR SKIN SENSITISATION

Does not meet the classification criteria for this hazard class

GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

CARCINOGENICITY

Does not meet the classification criteria for this hazard class

Acetone

The ACGIH classifies acetone as A4, that is, not classifiable as a human carcinogen: An agent that suggests that it may be carcinogenic to humans but which cannot be definitively assessed due to insufficient data. In vitro or animal studies do not provide sufficient carcinogenicity indications to classify the agent in one of the other categories.

XYLENE (MIXTURE OF ISOMERS)

Classified in group 3 (not classifiable as a human carcinogen) by the International Agency for Research on Cancer (IARC).

The US Environmental Protection Agency (EPA) argues that "the data was found to be inadequate for a potential assessment carcinogenic".

ETHYLBENZENE

Classified in Group 2B (possible human carcinogen) by the International Agency for Research on Cancer (IARC) - (IARC, 2000).

Classified in Group D (not classifiable as a human carcinogen) by the US Environmental Protection Agency (EPA) - (US EPA file on-line 2014).

REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class

STOT - SINGLE EXPOSURE

May cause drowsiness or dizziness

STOT - REPEATED EXPOSURE

Does not meet the classification criteria for this hazard class

ASPIRATION HAZARD

Toxic for aspiration

SECTION 12. Ecological information

12.1. Toxicity

Xilene, miscela di isomeri

LC50 - for Fish	> 2,6 mg/l/96h <i>Oncorhynchus mykiss</i>
EC50 - for Crustacea	> 8500 mg/l/48h <i>Palaemonetes pugio</i>
EC50 - for Algae / Aquatic Plants	4,36 mg/l/72h <i>Pseudokirchnerella subcapitata</i>

2-BUTOXYETHANOL

LC50 - for Fish	1474 mg/l/96h <i>Oncorhynchus mykiss</i>
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EC50 - for Crustacea 1550 mg/l/48h Daphnia magna

Acetone

LC50 - for Fish 5540 mg/l/96h Lepomis macrochirus

EC50 - for Crustacea 8800 mg/l/48h Daphnia pulex

Chronic NOEC for Crustacea

2212 mg/l Daphnia magna
, 28 d

12.2. Persistence and degradability

Xilene, miscela di isomeri

Solubility in water 100 - 1000 mg/l

Degradability: information not available

Xilene, miscela di isomeri

Solubility in water 60 mg/l ASTM E1148

Degradability: information not available

METANOLO

Solubility in water 1000 - 10000 mg/l

Rapidly degradable

ETHYLBENZENE

Solubility in water 1000 - 10000 mg/l

Rapidly degradable

2-BUTOXYETHANOL

Solubility in water 900 g/l 20°C

Rapidly degradable

Acetone

Rapidly degradable

ETHYL SILICATE

Solubility in water 1000 - 10000 mg/l

Rapidly degradable

12.3. Bioaccumulative potential

Xilene, miscela di isomeri

Partition coefficient: n-octanol/water 3,12

BCF 25,9

Xilene, miscela di isomeri

Partition coefficient: n-octanol/water 3,16

BCF 25,9

METANOLO

Partition coefficient: n-octanol/water -0,77

BCF 0,2

ETHYLBENZENE

Partition coefficient: n-octanol/water 3,6

2-BUTOXYETHANOL

Partition coefficient: n-octanol/water 0,81

Acetone

Partition coefficient: n-octanol/water -0,24

BCF 3

ETHYL SILICATE

Partition coefficient: n-octanol/water 3,18 Log Kow 40°C

BCF 3,16

12.4. Mobility in soil

Xilene, miscela di isomeri

Partition coefficient: soil/water 2,73

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. 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.

Waste transportation may be subject to ADR restrictions.

CONTAMINATED PACKAGING

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

SECTION 14. Transport information**14.1. UN number**

ADR / RID, IMDG, 1263

IATA:

14.2. UN proper shipping name

ADR / RID: PAINT RELATED MATERIAL

IMDG: PAINT RELATED MATERIAL

IATA: PAINT RELATED MATERIAL

14.3. Transport hazard class(es)

ADR / RID: Class: 3 Label: 3

IMDG: Class: 3 Label: 3

IATA: Class: 3 Label: 3

**14.4. Packing group**

ADR / RID, IMDG, IATA: II

14.5. Environmental hazards

ADR / RID: NO

IMDG: NO

IATA: NO

14.6. Special precautions for user

ADR / RID:	HIN - Kemler: 33	Limited Quantities: 5 L	Tunnel restriction code: (D/E)
	Special Provision: 640D		
IMDG:	EMS: F-E, <u>S-E</u>	Limited Quantities: 5 L	
IATA:	Cargo:	Maximum quantity: 60 L	Packaging instructions: 364
	Pass.:	Maximum quantity: 5 L	Packaging instructions: 353
	Special Instructions:	A3, A72, A192	

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

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/EC: P5c

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

Point 3 - 40

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 (EC) Reg. 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 performed for the following contained substances

Xilene, miscela di isomeri

SECTION 16. Other information

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

Flam. Liq. 2	Flammable liquid, category 2
Flam. Liq. 3	Flammable liquid, category 3
Acute Tox. 3	Acute toxicity, category 3
STOT SE 1	Specific target organ toxicity - single exposure, category 1
Acute Tox. 4	Acute toxicity, category 4
Asp. Tox. 1	Aspiration hazard, category 1
STOT RE 2	Specific target organ toxicity - repeated exposure, category 2
Eye Irrit. 2	Eye irritation, category 2
Skin Irrit. 2	Skin irritation, category 2
STOT SE 3	Specific target organ toxicity - single exposure, category 3
Aquatic Chronic 3	Hazardous to the aquatic environment, chronic toxicity, category 3
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H301	Toxic if swallowed.
H311	Toxic in contact with skin.
H331	Toxic if inhaled.
H370	Causes damage to organs.
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H332	Harmful if inhaled.
H304	May be fatal if swallowed and enters airways.
H373	May cause damage to organs through prolonged or repeated exposure.
H319	Causes serious eye irritation.
H315	Causes skin irritation.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.

H412 Harmful to aquatic life with long lasting effects.
EUH066 Repeated exposure may cause skin dryness or cracking.

LEGEND:

- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- CAS NUMBER: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE NUMBER: Identifier in ESIS (European archive of existing substances)
- CLP: EC Regulation 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 NUMBER: 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: EC Regulation 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 STEL: Short-term exposure limit
- TWA: Time-weighted average 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) 790/2009 (I Atp. CLP) of the European Parliament
 4. Regulation (EU) 2015/830 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
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 11. Regulation (EU) 2016/918 (VIII Atp. CLP) of the European Parliament
 12. Regulation (EU) 2016/1179 (IX Atp. CLP)
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 14. Regulation (EU) 2018/669 (XI Atp. CLP)
 15. Regulation (EU) 2018/1480 (XIII Atp. CLP)
 16. Regulation (EU) 2019/521 (XII 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:

02 / 03 / 08 / 09 / 10 / 11 / 12 / 15 / 16.