

Safety Data Sheet

According to Annex II to REACH - Regulation 2020/878

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

1.1. Product identifier

Code: DRAP301
Product name: ARMOSTONE

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

Intended use: BREATHABLE WATER REPELLENT CORTICAL CONSOLIDATOR

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 3	H226	Flammable liquid and vapour.
Serious eye damage, category 1	H318	Causes serious eye damage.
Skin irritation, category 2	H315	Causes skin irritation.
Specific target organ toxicity - single exposure, category 3	H335	May cause respiratory 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:



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SECTION 2. Hazards identification ... / >>

Signal words: Danger

Hazard statements:

H226 Flammable liquid and vapour.
H318 Causes serious eye damage.
H315 Causes skin irritation.
H335 May cause respiratory 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.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P280 Wear protective gloves/ protective clothing / eye protection / face protection.
P310 Immediately call a POISON CENTER / doctor / . . .
P370+P378 In case of fire: use . . . to extinguish.
P261 Avoid breathing dust / fume / gas / mist / vapours / spray.
P403+P233 Store in a well-ventilated place. Keep container tightly closed.

Contains: ISOBUTYL ALCOHOL
 PROPAN-2-OL
 ETHYL SILICATE
 Acetone

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 1272/2008 (CLP)
ISOBUTYL ALCOHOL		
CAS 78-83-1	$50 \leq x < 100$	Flam. Liq. 3 H226, Eye Dam. 1 H318, Skin Irrit. 2 H315, STOT SE 3 H335, STOT SE 3 H336
EC 201-148-0		
INDEX 603-108-00-1		
PROPAN-2-OL		
CAS 67-63-0	$10 \leq x < 20$	Flam. Liq. 2 H225, Eye Irrit. 2 H319, STOT SE 3 H336
EC 200-661-7		
INDEX 603-117-00-0		
REACH Reg. 01-2119457558-25-XXXX		
ETHYL SILICATE		
CAS 78-10-4	$3 \leq x < 9$	Flam. Liq. 3 H226, Acute Tox. 4 H332, Eye Irrit. 2 H319, STOT SE 3 H335 LC50 Inhalation mists/powders: 1,5 mg/l
EC 201-083-8		
INDEX 014-005-00-0		
REACH Reg. 01-2119496195-28-0003		
Acetone		
CAS 67-64-1	$1 \leq x < 3$	Flam. Liq. 2 H225, Eye Irrit. 2 H319, STOT SE 3 H336, EUH066
EC 200-662-2		
INDEX 606-001-00-8		
REACH Reg. 01-2119471330-49-XXXX		

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Diocetyl tin dilaurate

CAS 3648-18-8 $0 \leq x < 0,5$

EC 222-883-3

INDEX

REACH Reg. 01-2119979527-19-XXXX

Repr. 2 H361d, Acute Tox. 4 H302, Acute Tox. 4 H332, STOT RE 1 H372, Skin Corr. 1C H314, Eye Dam. 1 H318, STOT SE 2 H371, Aquatic Chronic 3 H412
STA Oral: 500 mg/kg, STA Inhalation vapours: 11 mg/l, STA Inhalation mists/powders: 1,5 mg/l, STA Inhalation gas: 4500 ppm

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. 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

No specific information on symptoms and effects caused by the product is known.

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.

SECTION 6. Accidental release measures ... / >>

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 (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 2020

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SECTION 8. Exposure controls/personal protection ... / >>

ISOBUTYL ALCOHOL

Predicted no-effect concentration - PNEC

Normal value in fresh water	0,4	mg/l
Normal value in marine water	0,04	mg/l
Normal value for fresh water sediment	1,52	mg/kg
Normal value for marine water sediment	0,152	mg/kg
Normal value for water, intermittent release	11	mg/l
Normal value of STP microorganisms	10	mg/l
Normal value for the terrestrial compartment	0,0699	mg/kg

Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers				Effects on workers			
	Acute	Acute	Chronic	Chronic	Acute	Acute	Chronic	Chronic
	local	systemic	local	systemic	local	systemic	local	systemic
Oral			25					
			mg/kg bw/d					
Inhalation			55				310	
			mg/m3				mg/m3	

PROPAN-2-OL

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
VLEP	FRA			980	400	
WEL	GBR	999	400	1250	500	
TLV-ACGIH		492	200	983	400	

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			

Acetone

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	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 oculr, 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	Acute	Chronic	Chronic	Acute	Acute	Chronic	Chronic
	local	systemic	local	systemic	local	systemic	local	systemic
Oral						62		
						mg/kg		
						bw/d		
Inhalation				200	2420			1210
				mg/m3	mg/m3			mg/m3
Skin				62				186
				mg/kg bw/d				mg/kg
								bw/d

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SECTION 8. Exposure controls/personal protection ... / >>

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, 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.

PROPAN-2-OL

Hand protection

the choice of an appropriate glove depends not only on its material but also on other quality characteristics and differs from one manufacturer to another. Observe the instructions regarding permeability and breakthrough time provided by the glove supplier. Also take into consideration the specific local conditions in which the product is used, such as the danger of cuts, abrasions and contact times. breakthrough time measured according to EN 374, due to numerous external influences (e.g. temperature).

gloves suitable for permanent contact: Material: nitrile rubber / nitrile latex

Breakthrough time: > = 480 min

Material thickness: 0.35mm

Material: butyl rubber

Breakthrough time: > = 480 min

Material thickness: 0.5mm

gloves suitable for splash protection: Material: Polychloroprene

Breakthrough time: > = 240 min

Material thickness: 0.5mm

unsuitable glove: Material: natural rubber / natural latex, polyvinyl chloride

Respiratory protection

personal respiratory protection devices are not normally required. In inadequately ventilated areas, where workplace limits are exceeded, where unpleasant odors exist, or where aerosols are present or smoke and mist occur, use a self-contained breathing apparatus or self-contained breathing apparatus with a type A filter or an appropriate combination filter (e.g. eg Where aerosols are in use or smoke and fog occur, A-P2 or ABEK-P2), in accordance with EN 141.

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.

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Properties	Value	Information
Appearance	liquid	
Colour	colourless	
Odour	characteristic	
Odour threshold	Not available	
Melting point / freezing point	Not available	
Initial boiling point	Not available	
Flammability	Not available	
Lower explosive limit	Not available	
Upper explosive limit	Not available	
Flash point	< 35 °C	
Auto-ignition temperature	Not available	
Decomposition temperature	Not available	
pH	Not available	
Kinematic viscosity	Not available	
Solubility	Not available	
Partition coefficient: n-octanol/water	Not available	
Vapour pressure	Not available	
Density and/or relative density	Not available	
Relative vapour density	Not available	

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/EC)	73,50 %
VOC (volatile carbon)	45,62 %

SECTION 10. Stability and reactivity

10.1. Reactivity

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

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SECTION 10. Stability and reactivity ... / >>

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.

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.

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.

SECTION 11. Toxicological information

11.1. Information on toxicological effects

PROPAN-2-OL

Effetti acuti:

Effetti irritativi dei vapori (a seconda della concentrazione) sulle mucose.

Effetti irritativi del liquido sugli occhi e sulle mucose del tratto digestivo; effetti sistemici dopo grave tossicità: Disturbi del sistema nervoso centrale e del sistema cardiovascolare

Effetti cronici:

Danno cutaneo (molto di rado). Nessun rapporto sugli effetti sistemici dopo l'esposizione in condizioni industriali.

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 /

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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

Information not available

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

Information not available

Interactive effects

Information not available

ACUTE TOXICITY

ATE (Inhalation - mists / powders) of the mixture:	> 5 mg/l
ATE (Oral) of the mixture:	Not classified (no significant component)
ATE (Dermal) of the mixture:	Not classified (no significant component)

ISOBUTYL ALCOHOL

LD50 (Oral):	> 2830 mg/kg Rat (OECD 401)
LD50 (Dermal):	> 2000 mg/kg Rabbit (OECD 402)

PROPAN-2-OL

LD50 (Oral):	4710 mg/kg Rat
LD50 (Dermal):	12800 mg/kg Rat
LC50 (Inhalation vapours):	72,6 mg/l/4h Rat

ETHYL SILICATE

LC50 (Inhalation mists/powders):	1,5 mg/l Conversione in stima puntuale della tossicità acuta
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Acetone

LD50 (Oral):	5800 mg/kg Rat
LD50 (Dermal):	7426 mg/kg Rat
LC50 (Inhalation vapours):	76 mg/l/4h Rabbit

Dioctyltin dilaurate

STA (Oral):	500 mg/kg estimate from table 3.1.2 of Annex I of the CLP (figure used for calculation of the acute toxicity estimate of the mixture)
STA (Inhalation mists/powders):	1,5 mg/l estimate from table 3.1.2 of Annex I of the CLP (figure used for calculation of the acute toxicity estimate of the mixture)
STA (Inhalation vapours):	11 mg/l estimate from table 3.1.2 of Annex I of the CLP (figure used for calculation of the acute toxicity estimate of the mixture)
STA (Inhalation gas):	4500 ppm estimate from table 3.1.2 of Annex I of the CLP (figure used for calculation of the acute toxicity estimate of the mixture)

SKIN CORROSION / IRRITATION

Causes skin irritation

ISOBUTYL ALCOHOL

On rabbit
Result: Irritating to skin

SERIOUS EYE DAMAGE / IRRITATION

Causes serious eye damage

SECTION 11. Toxicological information ... / >>

ISOBUTYL ALCOHOL

On rabbit

Method: OECD Test Guideline 405

Result: Irritating to eyes

RESPIRATORY OR SKIN SENSITISATION

Does not meet the classification criteria for this hazard class

Skin sensitization

ISOBUTYL ALCOHOL

Maximization Test

Route of exposure: Dermal

Species: Guinea pig

Method: OECD Test Guideline 406

Result: Does not cause skin sensitization.

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.

REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class

STOT - SINGLE EXPOSURE

May cause respiratory irritation

May cause drowsiness or dizziness

Diocetyl tin dilaurate

It can cause organ damage.

STOT - REPEATED EXPOSURE

Does not meet the classification criteria for this hazard class

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**12.1. Toxicity**

ISOBUTYL ALCOHOL

Tossicità per le alghe :

CE50r (Pseudokirchneriella subcapitata (alghe cloroficee)): 1.799 mg/l

Tempo di esposizione: 72 h

Metodo: OECD TG 201

SECTION 12. Ecological information ... / >>

ISOBUTYL ALCOHOL
LC50 - for Fish 1430 mg/l/96h Pimephales promelas
EC50 - for Crustacea 1100 mg/l/48h Daphnia magna
Chronic NOEC for Crustacea 20 mg/l 21d 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

ISOBUTYL ALCOHOL
Rapidamente biodegradabile.
Metodo: Linee Guida 301D per il Test dell'OECD

ISOBUTYL ALCOHOL
Rapidly degradable

Acetone
Rapidly degradable

PROPAN-2-OL
Rapidly degradable

ETHYL SILICATE
Solubility in water 1000 - 10000 mg/l
Rapidly degradable

12.3. Bioaccumulative potential

ISOBUTYL ALCOHOL
Partition coefficient: n-octanol/water 1 OECD 117

Diocetyl tin dilaurate
Partition coefficient: n-octanol/water 9,26
BCF 100

Acetone
Partition coefficient: n-octanol/water -0,24
BCF 3

PROPAN-2-OL
Partition coefficient: n-octanol/water 0,05 Log Kow 25°C

ETHYL SILICATE
Partition coefficient: n-octanol/water 3,18 Log Kow 40°C
BCF 3,16

12.4. Mobility in soil

Information not available

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

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

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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, IATA: 1993

14.2. UN proper shipping name

ADR / RID: FLAMMABLE LIQUID, N.O.S. (PROPAN-2-OL; Acetone)

IMDG: FLAMMABLE LIQUID, N.O.S. (PROPAN-2-OL; Acetone)

IATA: FLAMMABLE LIQUID, N.O.S. (PROPAN-2-OL; Acetone)

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: III

14.5. Environmental hazards

ADR / RID: NO

IMDG: NO

IATA: NO

14.6. Special precautions for user

ADR / RID: HIN - Kemler: 30

Limited Quantities: 5 L

Tunnel restriction code: (D/E)

Special provision: -

IMDG: EMS: F-E, S-E

Limited Quantities: 5 L

IATA: Cargo:

Maximum quantity: 220 L

Packaging instructions: 366

Pass.:

Maximum quantity: 60 L

Packaging instructions: 355

Special provision:

A3

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

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SECTION 15. Regulatory information ... / >>

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

Product

Point 40

Contained substance

Point 75

Regulation (EC) No. 2019/1148 - on the marketing and use of explosives precursors

Regulated explosives precursor

The acquisition, introduction, possession or use of that regulated explosives precursor by members of the general public is subject to reporting obligations as set out in Article 9.

All suspicious transactions and significant disappearances and thefts must be reported to the relevant national contact point.

Substances in Candidate List (Art. 59 REACH)

Dioctyltin dilaurate

REACH Reg.: 01-2119979527-19-XXXX

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 not been performed for the preparation/for the substances indicated in section 3.

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
Repr. 2	Reproductive toxicity, category 2
Acute Tox. 4	Acute toxicity, category 4
STOT RE 1	Specific target organ toxicity - repeated exposure, category 1
Skin Corr. 1C	Skin corrosion, category 1C
Eye Dam. 1	Serious eye damage, category 1
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
STOT SE 2	Specific target organ toxicity - single exposure, category 2
Aquatic Chronic 3	Hazardous to the aquatic environment, chronic toxicity, category 3
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H361d	Suspected of damaging the unborn child.
H302	Harmful if swallowed.
H332	Harmful if inhaled.
H372	Causes damage to organs through prolonged or repeated exposure.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H315	Causes skin irritation.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H371	May cause damage to organs.

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SECTION 16. Other information ... / >>

H412
EUH066Harmful to aquatic life with long lasting effects.
Repeated exposure may cause skin dryness or cracking.

LEGEND:

- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- ATE: Acute Toxicity Estimate
- 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: 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

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 2. Regulation (EC) 1272/2008 (CLP) of the European Parliament
 3. Regulation (EU) 2020/878 (II Annex of REACH Regulation)
 4. Regulation (EU) 790/2009 (I Atp. CLP) of the European Parliament
 5. Regulation (EU) 286/2011 (II Atp. CLP) of the European Parliament
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- 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.