

Safety Data Sheet

According to Annex II to REACH - Regulation (EU) 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: DT11A
Product name: DET 1
Chemical name and synonym: mixture of solvents and mineral substances

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

Intended use: Stain remover for oils and fats

Identified Uses	Industrial	Professional	Consumer
Professional uses: public sector (administration, education, entertainment, services, crafts)	-	ERC: 8b, 8e. PROC: 10, 11, 19. PC: 1.	-

1.3. Details of the supplier of the safety data sheet

Name: Industria Chimica General S.r.l.
Full address: Via Repubblica di San Marino 8
District and Country: 41122 Modena (MO) Italy
Tel.: (+39) 059 450991 / 059 450978
Fax: (+39) 059 450615
e-mail address of the competent person responsible for the Safety Data Sheet: ricerca@generalchemical.it
Supplier: Industria Chimica General S.r.l.

1.4. Emergency telephone number

For urgent inquiries refer to:
Milano, Italy (+39) 02 66101029 Centro Antiveleni Ospedale Niguarda Ca' Granda
Pavia, Italy (+39) 0382 24444 Centro Antiveleni IRCSS Fondazione Maugeri
Bergamo, Italy (+39) 800 883300 Centro Antiveleni Ospedali Riuniti
Firenze, Italy (+39) 055 7947819 Centro Antiveleni Ospedale Careggi
Roma, Italy (+39) 06 3054343 Centro Antiveleni Policlinico Gemelli
Roma, Italy (+39) 06 49978000 Centro Antiveleni Policlinico Umberto I
Napoli, Italy (+39) 081 7472870 Centro Antiveleni Ospedale Cardarelli

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:
Flammable liquid, category 2 H225 Highly flammable liquid and vapour.
Eye irritation, category 2 H319 Causes serious eye irritation.
Specific target organ toxicity - single exposure, category 3 H336 May cause drowsiness or dizziness.

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SECTION 2. Hazards identification ... / >>

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.
H319 Causes serious eye 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.
P280 Wear protective gloves/ protective clothing / eye protection / face protection.
P261 Avoid breathing vapours or spray.
P233 Keep container tightly closed.
P312 If you feel unwell, contact a POISON CENTER / doctor.
P501 Dispose of the product / container in an authorized installation according to national and local regulations.

Contains: propan-2-ol
acetone
propan-2-one
propanone

Product not intended for uses provided for by Directive 2004/42/EC.

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)
1.3 DIOXOLANE			
INDEX		35 ≤ x < 50	Flam. Liq. 2 H225, Eye Irrit. 2 H319
EC	211-463-5		
CAS	646-06-0		
REACH Reg.	01-2119490744-29		
propan-2-ol			
INDEX	603-117-00-0	19 ≤ x < 20	Flam. Liq. 2 H225, Eye Irrit. 2 H319, STOT SE 3 H336
EC	200-661-7		
CAS	67-63-0		
REACH Reg.	01-2119457558-25		
dimethyl sulfoxide			
INDEX		5 ≤ x < 10	
EC	200-664-3		
CAS	67-68-5		
REACH Reg.	01-2119431362-50		

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SECTION 3. Composition/information on ingredients ... / >>

Dipropylene Glycol MonomethyletherINDEX $1 \leq x < 5$

EC 252-104-2

CAS 34590-94-8

REACH Reg. 01-2119450011-60

acetone**propan-2-one****propanone**INDEX $1 \leq x < 5$

EC 200-662-2

CAS 67-64-1

REACH Reg. 01-2119471330-49

METHYL HYDROXY PROPYL CELLULOSEINDEX $0,1 \leq x < 0,5$

EC 618-389-6

CAS 9004-65-3

methanolINDEX $603-001-00-X$ $0,1 \leq x < 0,5$

EC 200-659-6

CAS 67-56-1

REACH Reg. 01-2119392409-28

Substance with a community workplace exposure limit.

Flam. Liq. 2 H225, Eye Irrit. 2 H319, STOT SE 3 H336, EUH066

Flam. Liq. 2 H225, Acute Tox. 3 H301, Acute Tox. 3 H311, Acute Tox. 3 H331, STOT SE 1 H370
STOT SE 2 H371: $\geq 3\%$
STA Oral: 100 mg/kg, STA Dermal: 300 mg/kg, STA Inhalation vapours: 3 mg/l

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. Wash immediately with plenty of water. If irritation persists, get medical advice/attention. Wash contaminated clothing before using it again.

INHALATION: Remove to open air. In the event of breathing difficulties, get medical advice/attention immediately.

INGESTION: Get medical advice/attention. Induce vomiting only if indicated by the doctor. Never give anything by mouth to an unconscious person, unless authorised by a doctor.

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

In case of accident or discomfort, consult a doctor immediately, showing the label and / or the safety data sheet. No special treatment provided.

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:

DEU	Deutschland	Forschungsgemeinschaft MAK- und BAT-Werte-Liste 2022 Ständige Senatskommission zur Prüfung gesundheitsschädlicher Arbeitsstoffe Mitteilung 58
ESP	España	Límites de exposición profesional para agentes químicos en España 2023
FRA	France	Valeurs limites d'exposition professionnelle aux agents chimiques en FranceDécret n° 2021-1849 du 28 décembre 2021
GRC	Ελλάδα	Π.Δ. 26/2020 (ΦΕΚ 50/Α' 6.3.2020) Εναρμόνιση της ελληνικής νομοθεσίας προς τις διατάξεις των οδηγιών 2017/2398/ΕΕ, 2019/130/ΕΕ και 2019/983/ΕΕ «για την τροποποίηση της οδηγίας

Industria Chimica General S.r.l.

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EN

SECTION 8. Exposure controls/personal protection

... / >>

ITA	Italia	2004/37/EK "σχετικά με την προστασία των εργαζομένων από τους κινδύνους που συνδέονται με την έκθεση σε καρκινογόνους ή μεταλλαξιγόνους παράγοντες κατά την εργασία"»
PRT	Portugal	Decreto Legislativo 9 Aprile 2008, n.81
POL	Polska	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
ROU	România	Rozporządzenie ministra rozwoju, pracy i technologii z dnia 18 lutego 2021 r. Zmieniające rozporządzenie w sprawie najwyższych dopuszczalnych stężeń i natężeń czynników szkodliwych dla zdrowia w środowisku pracy
GBR	United Kingdom	Hotărârea nr. 53/2021 pentru modificarea hotărârii guvernului nr. 1.218/2006, precum și pentru modificarea și completarea hotărârii guvernului nr. 1.093/2006
EU	OEL EU	EH40/2005 Workplace exposure limits (Fourth Edition 2020)
	TLV-ACGIH	Directive (EU) 2022/431; 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.
	RCP TLV	ACGIH 2023
		ACGIH TLVs and BEIs – Appendix H

1.3 DIOXOLANE

Predicted no-effect concentration - PNEC

Normal value in fresh water	19,7	mg/l
Normal value in marine water	1,97	mg/l
Normal value for fresh water sediment	77,7	mg/kg
Normal value for marine water sediment	7,77	mg/kg
Normal value for water, intermittent release	0,95	mg/l
Normal value of STP microorganisms	1	mg/l
Normal value for the terrestrial compartment	2,62	mg/kg

Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers		Chronic local	Chronic systemic	Effects on workers		Chronic local	Chronic systemic
	Acute local	Acute systemic			Acute local	Acute systemic		
Oral				6,5 mg/kg bw/d				
Inhalation				4,5 mg/m3				18,1 mg/m3
Skin				6,5 mg/kg bw/d				4,36 mg/kg bw/d

EPY 11.6.1 - SDS 1004.14

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

propan-2-ol

Threshold Limit Value						Remarks / Observations
Type	Country	TWA/8h		STEL/15min		
		mg/m3	ppm	mg/m3	ppm	
AGW	DEU	500	200	1000	400	
MAK	DEU	500	200	1000	400	
VLA	ESP	500	200	1000	400	
VLEP	FRA			980	400	
TLV	GRC	980	400	1225	500	
NDS/NDSch	POL	900		1200		
WEL	GBR	999	400	1250	500	
TLV-ACGIH		492	200	983	400	

Predicted no-effect concentration - PNEC				
Normal value in fresh water			140,9	mg/l
Normal value in marine water			140,9	mg/l
Normal value for fresh water sediment			552	mg/kg
Normal value for marine water sediment			552	mg/kg
Normal value for water, intermittent release			140,9	mg/l
Normal value of STP microorganisms			2251	mg/l
Normal value for the food chain (secondary poisoning)			160	mg/kg
Normal value for the terrestrial compartment			28	mg/kg

Health - Derived no-effect level - DNEL / DMEL								
Route of exposure	Effects on consumers			Chronic	Chronic	Effects on workers		
	Acute	Acute				Acute	Acute	Chronic
	local	systemic	local	local	systemic	local	systemic	local
Oral					26			
					mg/kg			
Inhalation					89			500
					mg/m3			mg/m3
Skin					319			888
					mg/kg			mg/kg

dimethyl sulfoxide

Predicted no-effect concentration - PNEC				
Normal value in fresh water			17	mg/l
Normal value in marine water			1,7	mg/l
Normal value for fresh water sediment			13,4	mg/kg
Normal value of STP microorganisms			11	mg/l
Normal value for the food chain (secondary poisoning)			0,7	mg/kg
Normal value for the terrestrial compartment			3,02	mg/kg

Health - Derived no-effect level - DNEL / DMEL								
Route of exposure	Effects on consumers			Chronic	Chronic	Effects on workers		
	Acute	Acute				Acute	Acute	Chronic
	local	systemic	local	local	systemic	local	systemic	local
Oral					60			
					mg/kg bw/d			
Inhalation			47	120				265
			mg/m3	mg/m3				mg/m3
Skin				100				200
				mg/kg bw/d				mg/kg
								bw/d

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

DIPROPYLEN GLYCOL MONOMETHYL ETHER

Threshold Limit Value						
Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
AGW	DEU	310	50	310	50	
MAK	DEU	310	50	310	50	
VLA	ESP	308	50			SKIN
VLEP	FRA	308	50			SKIN
TLV	GRC	600	100	900	150	
VLEP	ITA	308	50			SKIN
VLE	PRT	308	50			SKIN
NDS/NDSch	POL	240		480		SKIN
TLV	ROU	308	50			SKIN
WEL	GBR	308	50			SKIN
OEL	EU	308	50			SKIN
TLV-ACGIH		606	100	909	150	SKIN

Predicted no-effect concentration - PNEC		
Normal value in fresh water	19	mg/l
Normal value in marine water	1,9	mg/l
Normal value for fresh water sediment	70,2	mg/kg
Normal value for marine water sediment	7,02	mg/kg
Normal value for water, intermittent release	190	mg/l
Normal value of STP microorganisms	4168	mg/l
Normal value for the terrestrial compartment	2,74	mg/kg

Health - Derived no-effect level - DNEL / DMEL								
Route of exposure	Effects on consumers		Chronic local	Chronic systemic	Effects on workers			
	Acute local	Acute systemic			Acute local	Acute systemic	Chronic local	Chronic systemic
Oral				1,67 mg/kg bw/d				
Inhalation				37,2 mg/m3				310 mg/m3
Skin				15 mg/kg bw/d				65 mg/kg bw/d

acetone

propan-2-one
propanone

Threshold Limit Value						
Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
OEL	EU	1210	500			

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
Normal value for marine water sediment	3,04	mg/kg
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

Health - Derived no-effect level - DNEL / DMEL								
Route of exposure	Effects on consumers		Chronic local	Chronic systemic	Effects on workers			
	Acute local	Acute systemic			Acute local	Acute systemic	Chronic local	Chronic systemic
Oral				62 mg/kg				
Inhalation				200 mg/m3		2420 mg/m3		1210 mg/m3
Skin				62 mg/kg				186 mg/kg

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

methanol						
Threshold Limit Value						
Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
AGW	DEU	270	200	1080	800	SKIN
MAK	DEU	130	100	260	200	SKIN
VLA	ESP	266	200			SKIN
VLEP	FRA	260	200	1300	1000	SKIN 11
TLV	GRC	260	200	325	250	
VLEP	ITA	260	200			SKIN
VLE	PRT	260	200			SKIN
NDS/NDSch	POL	100		300		SKIN
TLV	ROU	260	200			SKIN
WEL	GBR	266	200	333	250	SKIN
OEL	EU	260	200			
TLV-ACGIH		262	200	328	250	SKIN

Predicted no-effect concentration - PNEC

Normal value in fresh water	NPI
Normal value in marine water	NPI
Normal value for fresh water sediment	NPI
Normal value for marine water sediment	NPI
Normal value for water, intermittent release	NPI
Normal value of STP microorganisms	NPI
Normal value for the food chain (secondary poisoning)	NPI
Normal value for the terrestrial compartment	NPI
Normal value for the atmosphere	NEA

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		4 mg/kg bw/d		4 mg/kg bw/d				
Inhalation	26 mg/m3	26 mg/m3	26 mg/m3	26 mg/m3	130 mg/m3	130 mg/m3	130 mg/m3	130 mg/m3
Skin	NPI	4 mg/kg bw/d	NPI	4 mg/kg bw/d	NPI	20 mg/kg bw/d	NPI	20 mg/kg bw/d

METHYL HYDROXY PROPYL CELLULOSE

Threshold Limit Value						
Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
TLV-ACGIH		3				RESP
RCP TLV		10				polvere totale

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 ; LOW = low hazard ; MED = medium hazard ; HIGH = high hazard.

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 your hands with category III work gloves (ref. Standard EN 374).

For the final choice of material for work gloves, the following must be considered: compatibility, degradation, breakage time and permeation. In the case of preparations, the resistance of work gloves to chemical agents must be checked before use as it is unpredictable. Gloves have a wear time that depends on the duration and mode of use.

SKIN PROTECTION

Wear category I 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 splash goggles with side shields and / or protective visors complying with EN 166 and EN 165. Do not use eye lenses.

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

RESPIRATORY PROTECTION

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. Use a mask with a type AX filter whose class (1, 2 or 3) must be chosen according to the limit of use concentration. (see standard EN 14387).

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.

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Properties	Value	Information
Appearance	dense liquid	
Colour	white	
Odour	characteristic	
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	5 °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	1,24 g/cm ³	
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

Total solids (250°C / 482°F)	0 %	
VOC (Directive 2010/75/EU)	69,60 % - 863,04	g/litre
VOC (volatile carbon)	35,42 % - 439,24	g/litre
Explosive properties	not explosive	
Oxidising properties	non-oxidizing	

SECTION 10. Stability and reactivity

10.1. Reactivity

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

DIPROPYLEN GLYCOL MONOMETHYL ETHER

Forms peroxides with: air.

acetone

propan-2-one

propanone

Decomposes under the effect of heat.

10.2. Chemical stability

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

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.

DIPROPYLEN GLYCOL MONOMETHYL ETHER

May react violently with: strong oxidising agents.

acetone

propan-2-one

propanone

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,sulphur dioxide,chromium trioxide,chromyl chloride,nitric

acid,chloroform,peroxymonosulphuric acid,phosphoryl oxychloride,chromosulphuric acid,fluorine,strong oxidising agents,strong reducing agents.Develops flammable gas on contact with: nitrosyl perchlorate.

10.4. Conditions to avoid

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

DIPROPYLEN GLYCOL MONOMETHYL ETHER

Avoid exposure to: sources of heat.Possibility of explosion.

acetone

propan-2-one

propanone

Avoid exposure to: sources of heat,naked flames.

10.5. Incompatible materials

acetone

propan-2-one

propanone

Incompatible with: acids,oxidising 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

propan-2-one

propanone

May develop: ketenes,irritant substances.

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

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

methanol

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

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:

>2000 mg/kg

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SECTION 11. Toxicological information ... / >>

1.3 DIOXOLANE

LD50 (Dermal): > 2000 mg/kg rabbit
LD50 (Oral): > 2000 mg/kg rat
LC50 (Inhalation vapours): 68,4 mg/l rat

propan-2-ol

LD50 (Dermal): 16,4 ml/kg rabbit
LD50 (Oral): 5840 mg/kg rat
LC50 (Inhalation vapours): > 10000 ppm/6h rat

dimethyl sulfoxide

LD50 (Dermal): 40000 mg/kg ratto
LD50 (Oral): 28300 mg/kg ratto
LC50 (Inhalation vapours): > 5,33 mg/l/4h ratto

DIPROPYLEN GLYCOL MONOMETHYL ETHER

LD50 (Dermal): > 9500 mg/kg rat
LD50 (Oral): > 5000 mg/kg ratto

acetone

propan-2-one

propanone

LD50 (Dermal): > 20 ml/kg rabbit
LD50 (Oral): 5800 mg/kg rat
LC50 (Inhalation vapours): 76 mg/l/4h rat

methanol

LD50 (Dermal): 17100 mg/kg rabbit
STA (Dermal): 300 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)
LD50 (Oral): 1187 mg/kg rat
STA (Oral): 100 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)
LC50 (Inhalation vapours): 437 mg/l/6h cat
STA (Inhalation vapours): 3 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)

SKIN CORROSION / IRRITATION

Does not meet the classification criteria for this hazard class

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

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

SECTION 11. Toxicological information ... / >>

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

Use this product according to good working practices. Avoid littering. Inform the competent authorities, should the product reach waterways or contaminate soil or vegetation.

12.1. Toxicity

propan-2-ol
EC50> 10000 mg / l / 24 h Daphnia magna
EC50 1800 mg / l / 7 d Scenedesmus quadricauda

DIPROPYLEN GLYCOL MONOMETHYL ETHER
LC50 - for Fish > 1000 mg/l/96h Pimphales promelas
EC50 - for Crustacea 1919 mg/l/48h Daphnia magna
EC50 - for Algae / Aquatic Plants 969 mg/l/96/h Selenastrum capricornum

methanol
EC50 - for Algae / Aquatic Plants 22 mg/l/72h

propan-2-ol
LC50 - for Fish 9640 mg/l/96h Pimephales promelas

acetone
propan-2-one
propanone
LC50 - for Fish 4144 mg/l/96h
EC50 - for Crustacea 1680 mg/l/48h
EC50 - for Algae / Aquatic Plants 302 mg/l/72h
Chronic NOEC for Fish 4042 mg/l 14d

1.3 DIOXOLANE
LC50 - for Fish > 95,4 mg/l/96h
EC50 - for Crustacea 772 mg/l/48h
EC50 - for Algae / Aquatic Plants 877 mg/l/72h
Chronic NOEC for Crustacea 197,4 mg/l

dimethyl sulfoxide
LC50 - for Fish 25000 mg/l/96h Brachydanio rerio
EC50 - for Crustacea 24600 mg/l/48h Daphnia magna
EC50 - for Algae / Aquatic Plants 17000 mg/l/72h Pseudokirchneriella subcapitata

12.2. Persistence and degradability

DIPROPYLEN GLYCOL MONOMETHYL ETHER
Solubility in water 1000 - 10000 mg/l
Rapidly degradable

methanol
Solubility in water 1000 g/l 20 °C
Rapidly degradable

propan-2-ol
Rapidly degradable

acetone
propan-2-one

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SECTION 12. Ecological information ... / >>

propanone
Rapidly degradable

1,3 DIOXOLANE
NOT rapidly degradable

dimethyl sulfoxide
NOT rapidly degradable 31% 28 giorni

12.3. Bioaccumulative potential

DIPROPYLEN GLYCOL MONOMETHYL ETHER
Partition coefficient: n-octanol/water 0,0043

methanol
Partition coefficient: n-octanol/water -0,77
BCF 0,2

propan-2-ol
Partition coefficient: n-octanol/water 0,05

1,3 DIOXOLANE
Partition coefficient: n-octanol/water -0,37

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. 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.
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 or ID number

ADR / RID, IMDG, IATA: UN 1993

14.2. UN proper shipping name

ADR / RID: FLAMMABLE LIQUID, N.O.S.(1,3 dioxolane, propan-2-ol)
IMDG: FLAMMABLE LIQUID, N.O.S.(1,3 dioxolane, propan-2-ol)
IATA: FLAMMABLE LIQUID, N.O.S.(1,3 dioxolane, propan-2-ol)

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SECTION 14. Transport information ... / >>

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: 1 L	Tunnel restriction code: (D/E)
	Special provision: 274, 601, 640(C-D)		
IMDG:	EMS: F-E, S-E	Limited Quantities: 1 L	
IATA:	Cargo:	Maximum quantity: 60 L	Packaging instructions: 364
	Passengers:	Maximum quantity: 5 L	Packaging instructions: 353
	Special provision:	A3	

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: P5c

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

Product	
Point	3 - 40
Contained substance	
Point	75

Regulation (EU) 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)

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

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SECTION 15. Regulatory information ... / >>

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

1.3 DIOXOLANE
propan-2-ol
dimethyl sulfoxide
acetone
propan-2-one
propanone
methanol

This safety data sheet contains one or more Exposure Scenarios in an integrated form. Contents have been included in sections 1.2, 8, 9, 12, 15 and 16 of this safety data sheet.

SECTION 16. Other information

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

Flam. Liq. 2	Flammable liquid, category 2
Acute Tox. 3	Acute toxicity, category 3
STOT SE 1	Specific target organ toxicity - single exposure, category 1
Eye Irrit. 2	Eye irritation, category 2
STOT SE 3	Specific target organ toxicity - single exposure, category 3
H225	Highly flammable liquid and vapour.
H301	Toxic if swallowed.
H311	Toxic in contact with skin.
H331	Toxic if inhaled.
H370	Causes damage to organs.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
EUH066	Repeated exposure may cause skin dryness or cracking.

Use descriptor system:

ERC 8b	Widespread use of reactive processing aid (no inclusion into or onto article, indoor)
ERC 8e	Widespread use of reactive processing aid (no inclusion into or onto article, outdoor)
PC 1	Adhesives, sealants
PROC 10	Roller application or brushing
PROC 11	Non industrial spraying
PROC 19	Manual activities involving hand contact

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
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PMT: Persistent, mobile and toxic
- PNEC: Predicted no effect concentration

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SECTION 16. Other information ... / >>

- 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
- vPvM: Very persistent and very mobile
- 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)
22. Delegated Regulation (UE) 2022/692 (XVIII Atp. CLP)
23. Delegated Regulation (UE) 2023/707

- 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:

01 / 03 / 08 / 11 / 12 / 14 / 15.