

Safety Data Sheet

According to Annex II to REACH - Regulation (EU) 2020/878

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

1.1. Product identifier

Code: DIL.PU.017
Product name: MAX THINNER LPL
UFI : 96Q8-R0JJ-Y00K-C3QV

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

Intended use: Coating product or related for industrial purpose. Only for professional use.

1.3. Details of the supplier of the safety data sheet

Name: ASTRA VERNICI S.R.L.
Full address: Via Della Industria, 4
District and Country: 24052 Azzano San Paolo (BG)
Italy
Tel.: +39 035 530019
Fax: +39 035 531714
e-mail address of the competent person responsible for the Safety Data Sheet: msds@astravernici.it

1.4. Emergency telephone number

For urgent inquiries refer to:
REPUBLIC OF IRELAND :
National Poisons Information Centre
24 hours per day and 365 days a year
01 837 9964
01 809 2566

UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND :
National Health Service (NHS)
Telephone number: 111
Emergency number : 999

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.
Reproductive toxicity, category 2	H361d	Suspected of damaging the unborn child.
Aspiration hazard, category 1	H304	May be fatal if swallowed and enters airways.
Specific target organ toxicity - repeated exposure, category 2	H373	May cause damage to organs through prolonged or repeated exposure.
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.
Hazardous to the aquatic environment, chronic toxicity, category 3	H412	Harmful to aquatic life with long lasting effects.

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.
H361d	Suspected of damaging the unborn child.
H304	May be fatal if swallowed and enters airways.
H373	May cause damage to organs through prolonged or repeated exposure.
H318	Causes serious eye damage.
H315	Causes skin irritation.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H412	Harmful to aquatic life with long lasting effects.

Precautionary statements:

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P331	Do NOT induce vomiting.
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 dry chemical or CO2 to extinguish.

Contains:

TOLUENE
BUTAN-1-OL
ACETONE
1-METHOXY-2-PROPANOL

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)
TOLUENE		
INDEX 601-021-00-3	$50 \leq x < 55$	Flam. Liq. 2 H225, Repr. 2 H361d, Asp. Tox. 1 H304, STOT RE 2 H373, Skin Irrit. 2 H315, STOT SE 3 H336, Aquatic Chronic 3 H412
EC 203-625-9		
CAS 108-88-3		
REACH Reg. 01-2119471310-51-xxxx		
BUTAN-1-OL		
INDEX 603-004-00-6	$30 \leq x < 35$	Flam. Liq. 3 H226, Acute Tox. 4 H302, Eye Dam. 1 H318, Skin Irrit. 2 H315, STOT SE 3 H335, STOT SE 3 H336
EC 200-751-6		
CAS 71-36-3		LD50 Oral: 790 mg/kg

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

REACH Reg. 01-2119484630-38-xxxx

ACETONEINDEX 606-001-00-8 $11 \leq x < 16$

EC 200-662-2

CAS 67-64-1

REACH Reg. 01-2119471330-49-xxxx

1-METHOXY-2-PROPANOLINDEX 603-064-00-3 $5 \leq x < 5,05$

EC 203-539-1

CAS 107-98-2

REACH Reg. 01-2119457435-35-xxxx

Flam. Liq. 2 H225, Eye Irrit. 2 H319, STOT SE 3 H336, EUH066**Flam. Liq. 3 H226, STOT SE 3 H336**

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**

In case of doubt or in the presence of symptoms contact a doctor and show him this document.

In case of more severe symptoms, ask for immediate medical aid.

EYES: Remove, if present, contact lenses if the situation allows you to do so easily. Wash immediately with plenty of water for at least 15 minutes, opening the eyelids fully. Get medical advice/attention.

SKIN: Take off contaminated clothing. Wash immediately and thoroughly with running water (and soap if possible). Get medical advice.

Avoid further contact with contaminated clothing.

INGESTION: Do not induce vomiting unless explicitly authorised by a doctor. Do not give anything by mouth to an unconscious person. Get medical advice/attention.

INHALATION: Remove victim to fresh air, away from the accident scene. In the event of respiratory symptoms (coughing, wheezing, breathing difficulty, asthma) keep the victim in a comfortable position for breathing. If necessary administer oxygen. If the subject stops breathing, administer artificial respiration. Get medical advice/attention.

Rescuer protection

It is good practice for rescuers lending support to a person who has been exposed to a chemical substance or to a mixture to wear personal protective equipment. The nature of such protection depends on the hazard level of the substance or mixture, on the type of exposure and on the extent of the contamination. In the absence of other more specific indications, use of disposable gloves in the event of possible contact with body fluids is recommended. For the type of PPE suitable for the characteristics of the substance or mixture, see section 8.

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

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

DELAYED EFFECTS: Based on the information currently available, there are no known cases of delayed effects following exposure to this product.

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

Immediately call a POISON CENTER / doctor.

Means to have available in the workplace for specific and immediate treatment

Running water for skin and eye wash.

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.

SECTION 5. Firefighting measures ... / >>**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:

BGR	България	НАРЕДБА № 13 ОТ 30 ДЕКЕМВРИ 2003 Г. ЗА ЗАЩИТА НА РАБОТЕЩИТЕ ОТ РИСКОВЕ, СВЪРЗАНИ С ЕКСПОЗИЦИЯ НА ХИМИЧНИ АГЕНТИ ПРИ РАБОТА (изм. ДВ. бр.5 от 17 Януари 2020г.)
CZE	Česká Republika	NAŘÍZENÍ VLÁDY ze dne 10. května 2021, kterým se mění nařízení vlády č. 361/2007 Sb., kterým se stanoví podmínky ochrany zdraví při práci
DEU	Deutschland	Forschungsgemeinschaft MAK- und BAT-Werte-Liste 2022 Ständige Senatskommission zur Prüfung gesundheitsschädlicher Arbeitsstoffe Mitteilung 58
DNK	Danmark	Bekendtgørelse om grænseværdier for stoffer og materialer - BEK nr 1458 af 13/12/2019
ESP	España	Límites de exposición profesional para agentes químicos en España 2023
FRA	France	Valeurs limites d'exposition professionnelle aux agents chimiques en France Décret 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 2004/37/ΕΚ "σχετικά με την προστασία των εργαζομένων από τους κινδύνους που συνδέονται με την έκθεση σε καρκινογόνους ή μεταλλαξιογόνους παράγοντες κατά την εργασία"»
HUN	Magyarország	Az innovációért és technológiáért felelős miniszter 5/2020. (II. 6.) ITM rendelete a kémiai kóroki tényezők hatásának kitett munkavállalók egészségének és biztonságának védelméről
HRV	Hrvatska	Pravilnik o izmjenama i dopunama Pravilnika o zaštiti radnika od izloženosti opasnim kemikalijama na radu, graničnim vrijednostima izloženosti i biološkim graničnim vrijednostima (NN 1/2021)
ITA	Italia	Decreto Legislativo 9 Aprile 2008, n.81
LTU	Lietuva	Jsakymas dėl lietuvis higienos normos hn 23:2011 „cheminių medžiagų profesinio poveikio ribiniai dydžiai. Matavimo ir poveikio vertinimo bendrieji reikalavimai“ patvirtinimo
PRT	Portugal	Decreto-Lei n.º 1/2021 de 6 de janeiro, valores-limite de exposição profissional indicativos para os agentes químicos. Decreto-Lei n.º 35/2020 de 13 de julho, proteção dos trabalhadores contra os riscos ligados à exposição durante o trabalho a agentes cancerígenos ou mutagénicos
POL	Polska	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
ROU	România	Hotărârea nr. 53/2021 pentru modificarea hotărârii guvernului nr. 1.218/2006, precum și pentru modificarea și completarea hotărârii guvernului nr. 1.093/2006
RUS	Россия	ПОСТАНОВЛЕНИЕ от 13 февраля 2018 г. N 25 ОБ УТВЕРЖДЕНИИ ГИГИЕНИЧЕСКИХ НОРМАТИВОВ ГН 2.2.5.3532-18 "ПРЕДЕЛЬНО ДОПУСТИМЫЕ КОНЦЕНТРАЦИИ (ПДК) ВРЕДНЫХ ВЕЩЕСТВ В ВОЗДУХЕ РАБОЧЕЙ ЗОНЫ"
SVN	Slovenija	Pravilnik o varovanju delavcev pred tveganji zaradi izpostavljenosti kemičnim snovem pri delu (Uradni list RS, št. 100/01, 39/05, 53/07, 102/10, 43/11 – ZVZD-1, 38/15, 78/18 in 78/19)
TUR	Türkiye	Kimyasal Maddelerle Çalışmalarda Sağlık ve Güvenlik Önlemleri Hakkında Yönetmelik 12.08.2013 / 28733; 20.10.2023 / 32345.
GBR	United Kingdom	EH40/2005 Workplace exposure limits (Fourth Edition 2020)
EU	OEL EU	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.
	TLV-ACGIH	ACGIH 2023

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

TOLUENE

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
TLV	BGR	192	50	384	100	SKIN
TLV	CZE	192	50,112	384	100,224	SKIN
AGW	DEU	190	50	760	200	SKIN
MAK	DEU	190	50	380	100	SKIN
TLV	DNK	94	25	384	100	SKIN E
VLA	ESP	192	50	384	100	SKIN
VLEP	FRA	76,8	20	384	100	SKIN
TLV	GRC	192	50	384	100	
AK	HUN	192	50	384	100	SKIN
GVI/KGVI	HRV	192	50	384	100	SKIN
VLEP	ITA	192	50			SKIN
RD	LTU	192	50	384	100	SKIN
VLE	PRT	192	50	384	100	SKIN
NDS/NDSch	POL	100		200		SKIN
TLV	ROU	192	50	384	100	SKIN
ПДК	RUS	50		150		n
MV	SVN	192	50	384	100	SKIN
ESD	TUR	192	50	384	100	SKIN
WEL	GBR	191	50	384	100	SKIN
OEL	EU	192	50	384	100	SKIN
TLV-ACGIH			20			

BUTAN-1-OL

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
TLV	BGR	100		150		
TLV	CZE	300	97,5	600	195	
AGW	DEU	310	100	310	100	
MAK	DEU	310	100	310	100	
TLV	DNK			150 (C)	50 (C)	SKIN
VLA	ESP	61	20	154	50	
VLEP	FRA			150	50	
TLV	GRC	300	100	300	100	
AK	HUN	45		90		SKIN
GVI/KGVI	HRV			154	50	SKIN
RD	LTU	45	15	90 (C)	30 (C)	SKIN
NDS/NDSch	POL	50		150		SKIN
TLV	ROU	100	33	200	66	
ПДК	RUS	10		30		n
MV	SVN	310	100	310	100	
ESD	TUR	300	100			
WEL	GBR			154	50	SKIN
TLV-ACGIH		61	20			

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

1-METHOXY-2-PROPANOL

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
TLV	BGR	375	100	568	150	SKIN
TLV	CZE	270	72,09	550	146,85	SKIN
AGW	DEU	370	100	740	200	
MAK	DEU	370	100	740	200	
TLV	DNK	185	50	568	150	SKIN E
VLA	ESP	375	100	568	150	SKIN
VLEP	FRA	188	50	375	100	SKIN
TLV	GRC	360	100	1080	300	
AK	HUN	375	100	568	150	SKIN
GVI/KGVI	HRV	375	100	568	150	
VLEP	ITA	375	100	568	150	SKIN
RD	LTU	190	50	300	75	SKIN
VLE	PRT	375	100	568	150	
NDS/NDSch	POL	180		360		SKIN
TLV	ROU	375	100	568	150	SKIN
MV	SVN	375	100	568	150	SKIN
ESD	TUR	375	100	568	150	SKIN
WEL	GBR	375	100	560	150	SKIN
OEL	EU	375	100	568	150	SKIN
TLV-ACGIH		184	50	368	100	

ACETONE

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
TLV	BGR	600		1400		
TLV	CZE	800	331,2	1500	621	
AGW	DEU	1200	500	2400	1000	
MAK	DEU	1200	500	2400	1000	
TLV	DNK	600	250			E
VLA	ESP	1210	500			
VLEP	FRA	1210	500	2420	1000	
TLV	GRC	1780		3560		
AK	HUN	1210	500			
GVI/KGVI	HRV	1210	500			
VLEP	ITA	1210	500			
RD	LTU	1210	500	2420	1000	
VLE	PRT	1210	500			
NDS/NDSch	POL	600		1800		
TLV	ROU	1210	500			
ПДК	RUS	200		800		n
MV	SVN	1210	500	2420	1000	
ESD	TUR	1210	500			
WEL	GBR	1210	500	3620	1500	
OEL	EU	1210	500			
TLV-ACGIH			250		500	

Legend:

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

TOLUENE

TOLUENE: Adopted Biological Exposure Indices (BEIs) - ACGIH (2012): Determinant 1: Toluene in blood / Sampling Time: Prior to last shift of workweek / BEI@: 0,02 mg/L. / Notation: none - Determinant 2: Toluene in urine / Sampling Time: End of shift / BEI@: 0,03 mg/L. / Notation: none - Determinant 3: o-Cresol in urine / Sampling Time: End of shift / BEI@: 0,3 mg/g. creatinine / Notation: B = Background. ETILBENZENE

Adopted Biological Exposure Indices (BEIs) - ACGIH (2012): Determinant 1: Sum of mandelic acid and phenylglyoxylic acid in urine / Sampling Time: End of shift at end of workweek / BEI@: 0,7 g/g / Notation: Sq (Semiquantitative) - Determinant 2: (Ethyl benzene in end-exhaled air) / Sampling Time: Not critical / BEI@: - / Notation: Sq = Semiquantitative.

ACETONE

ACETONE: Adopted Biological Exposure Indices (BEIs) - ACGIH (2012): Determinant: Acetone in urine / Sampling Time: End of shift / BEI@: 50 mg/L / Notation: Ns =Nonspecific.

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

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.

Exposure levels must be kept as low as possible to avoid significant build-up in the organism. Manage personal protective equipment so as to guarantee maximum protection (e.g. reduction in replacement times).

HAND PROTECTION

Protect hands with category III work gloves.

The following should be considered when choosing work glove material (see standard EN 374): compatibility, degradation, permeability time.

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 ISO 16321).

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.

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

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Properties	Value	Information
Appearance	liquid	
Colour	colourless	
Odour	typical of solvent	
Melting point / freezing point	not available	
Initial boiling point	> 35 °C	
Flammability	flammable liquid	
Lower explosive limit	not available	
Upper explosive limit	not available	
Flash point	< 23 °C	
Auto-ignition temperature	not available	
Decomposition temperature	not available	
pH	not available	Reason for missing data: substance/mixture is non-polar/aprotic (eg: an organic solvent mixture)
Kinematic viscosity	11,8 mm ² /s	Temperature: 20 °C
Dynamic viscosity	44"	Method: Ford Cup 2
		Remark: 100 cc.
		Temperature: 20 °C
Solubility	insoluble in water	
Partition coefficient: n-octanol/water	not available	
Vapour pressure	49,92 mmHg	
Density and/or relative density	0,85 kg/l	
Relative vapour density	not available	
Particle characteristics	not applicable	

SECTION 9. Physical and chemical properties ... / >>

9.2. Other information

9.2.1. Information with regard to physical hazard classes

Information not available

9.2.2. Other safety characteristics

VOC (Directive 2010/75/EU)	100,00 %	-	850,00	g/litre
VOC (volatile carbon)	76,97 %	-	654,26	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.

TOLUENE

Avoid exposure to: light.

BUTAN-1-OL

Attacks various types of plastic materials.

1-METHOXY-2-PROPANOL

Dissolves various plastic materials. Stable in normal conditions of use and storage.

Absorbs and dissolves in water and in organic solvents. With air it may slowly form explosive peroxides.

ACETONE

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.

TOLUENE

Risk of explosion on contact with: fuming sulphuric acid, nitric acid, silver perchlorate, nitrogen dioxide, non-metal halogenates, acetic acid, organic nitrocompounds. May form explosive mixtures with: air. May react dangerously with: strong oxidising agents, strong acids, sulphur.

BUTAN-1-OL

Reacts violently developing heat on contact with: aluminium, strong oxidising agents, strong reducing agents, hydrochloric acid. Forms explosive mixtures with: air.

1-METHOXY-2-PROPANOL

May react dangerously with: strong oxidising agents, strong acids.

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, sulphur dioxide, chromium trioxide, chromyl chloride, nitric acid, chloroform, peroxy monosulphuric 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.

BUTAN-1-OL

Avoid exposure to: sources of heat, naked flames.

1-METHOXY-2-PROPANOL

Avoid exposure to: air.

ACETONE

Avoid exposure to: sources of heat, naked flames.

10.5. Incompatible materials

1-METHOXY-2-PROPANOL

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

ACETONE

Incompatible with: acids, oxidising substances.

10.6. Hazardous decomposition products

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

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

ACETONE

May develop: ketenes, irritant substances.

SECTION 11. Toxicological information

In the absence of experimental data for the product itself, health hazards are evaluated according to the properties of the substances it contains, using the criteria specified in the applicable regulation for classification.

It is therefore necessary to take into account the concentration of the individual hazardous substances indicated in section 3, to evaluate the toxicological effects of exposure to the product.

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

TOLUENE

WORKERS: inhalation; contact with the skin.

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

1-METHOXY-2-PROPANOL

WORKERS: inhalation; contact with the skin.

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

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

TOLUENE

Toxic effect on the central and peripheral nervous system with encephalopathy and polyneuritis; irritating for the skin, conjunctiva, cornea and respiratory apparatus.

1-METHOXY-2-PROPANOL

The main route of entry is the skin, whereas the respiratory route is less important due to the low vapour pressure of the product.

Above 100 ppm causes irritation of the eye, nose and oropharynx mucous membranes. At 1000 ppm, disturbance of equilibrium and severe eye irritation can be noticed. Clinical and biological examinations carried out on exposed volunteers revealed no anomalies.

Acetate produces greater skin and eye irritation with direct contact. No chronic effects on humans have been reported.

Interactive effects

TOLUENE

Certain drugs and other industrial products can interfere with the metabolism of the toluene.

ACUTE TOXICITY

ATE (Inhalation) of the mixture:

Not classified (no significant component)

ATE (Oral) of the mixture:

>2000 mg/kg

ATE (Dermal) of the mixture:

Not classified (no significant component)

TOLUENE

LD50 (Dermal):

12124 mg/kg Rabbit

LD50 (Oral):

5580 mg/kg Rat

LC50 (Inhalation vapours):

28,1 mg/l/4h Rat

BUTAN-1-OL

LD50 (Dermal):

3400 mg/kg Rabbit

LD50 (Oral):

790 mg/kg Rat

LC50 (Inhalation vapours):

8000 ppm/4h Rat

1-METHOXY-2-PROPANOL

LD50 (Dermal):

13000 mg/kg Rabbit

LD50 (Oral):

5300 mg/kg Rat

LC50 (Inhalation vapours):

54,6 mg/l/4h Rat

SKIN CORROSION / IRRITATION

SECTION 11. Toxicological information ... / >>

Causes skin irritation

SERIOUS EYE DAMAGE / IRRITATION

Causes serious eye damage

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

TOLUENE

Classified in Group 3 (not classifiable as a human carcinogen) by the International Agency for Research on Cancer (IARC) - (IARC, 1999).

The US Environmental Protection Agency (EPA) affirms that "the data is inadequate for an assessment of the carcinogenic potential".

REPRODUCTIVE TOXICITY

Suspected of damaging the unborn child

STOT - SINGLE EXPOSURE

May cause respiratory irritation
May cause drowsiness or dizziness

STOT - REPEATED EXPOSURE

May cause damage to organs

ASPIRATION HAZARD

Toxic for aspiration

11.2. Information on other hazards

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

SECTION 12. Ecological information

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

12.1. Toxicity

Information not available

12.2. Persistence and degradabilityTOLUENE

Solubility in water 100 - 1000 mg/l
Rapidly degradable

BUTAN-1-OL

Solubility in water 1000 - 10000 mg/l
Rapidly degradable

SECTION 12. Ecological information ... / >>

1-METHOXY-2-PROPANOL
Solubility in water 1000 - 10000 mg/l
Rapidly degradable

ACETONE
Rapidly degradable

12.3. Bioaccumulative potential

TOLUENE
Partition coefficient: n-octanol/water 2,73
BCF 90

BUTAN-1-OL
Partition coefficient: n-octanol/water 1
BCF 3,16

1-METHOXY-2-PROPANOL
Partition coefficient: n-octanol/water < 1

ACETONE
Partition coefficient: n-octanol/water -0,23
BCF 3

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.
The management of waste arising from the use or dispersal of this product must be organised in accordance with occupational safety regulations. See section 8 for possible need for PPE.
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 1263

14.2. UN proper shipping name

ADR / RID: PAINT RELATED MATERIAL
IMDG: PAINT RELATED MATERIAL
IATA: PAINT RELATED MATERIAL

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: not marine pollutant
IATA: NO

14.6. Special precautions for user

ADR / RID:	HIN - Kemler: 33	Limited Quantities: 5 lt	Tunnel restriction code: (D/E)
	Special provision: 163, 367, 640C, 650		
IMDG:	EMS: F-E, S-E	Limited Quantities: 5 lt	
IATA:	Cargo:	Maximum quantity: 60 L	Packaging instructions: 364
	Passengers:	Maximum quantity: 5 L	Packaging instructions: 353
	Special provision:	A3, A72, A192	

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	BUTAN-1-OL
		REACH Reg.: 01-2119484630-38-xxxx
Point	75	ACETONE
		REACH Reg.: 01-2119471330-49-xxxx
Point	48-75	TOLUENE
		REACH Reg.: 01-2119471310-51-xxxx

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:

SECTION 15. Regulatory information ... / >>

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
Asp. Tox. 1	Aspiration hazard, category 1
STOT RE 2	Specific target organ toxicity - repeated exposure, category 2
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
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.
H304	May be fatal if swallowed and enters airways.
H373	May cause damage to organs through prolonged or repeated exposure.
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.
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
- 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

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

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4. Regulation (EC) 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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- 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:

04 / 08 / 09 / 13 / 14 / 15.