

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: VSBLOC400
 Product name: UNBLOCKING 400 ml
 UFI: QX20-503A-D005-5NGQ

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

Intended use: Aerosol lubricant.

Identified Uses	Industrial	Professional	Consumer
Consumer	-	-	✓
Industrial Use	✓	-	-
Professional Use	-	✓	-

1.3. Details of the supplier of the safety data sheet

Name: Carima Srl
 Full address: Via dei Brughì 30/31
 District and Country: 20060 Gessate (MI)
 Italy
 Tel. +39 02 95384225
 Fax +39 02 70058164

e-mail address of the competent person

responsible for the Safety Data Sheet: carima@carima.biz

1.4. Emergency telephone number

For urgent inquiries refer to

IT - Centro Antiveleni di Milano - Ospedale Niguarda: Tel. 02 66101029 (Italy)
 AT - Vergiftungsinformationszentrale (VIZ): Tel. +43 01 406 4343 (Austria)
 BE - Belgisch Antigifcentrum: Tel. 070 245245 (Belgium)
 BG - НАЦИОНАЛЕН ЦЕНТЪР ПО ТОКСИКОЛОГИЯ: Tel. +359 2 9154 233 (Bulgaria)
 HR - Centar za kontrolu otrovanja: Tel. +385 1 2348342 (Croatia)
 CY - Τμήμα Επιθεώρησης Εργασίας (TEE): Tel. 1401 (Cyprus)
 CZ - Toxikologické informační středisko (TIS): Tel. +420 224 919 293 / +420 224 915 402 (Czech Republic)
 DK - Giftlinjen: Ring 82 12 12 12 (Denmark)
 EE - Mürgistusteabekeskus: Tel. 16662 (Estonia)
 FI - Myrkytystietokeskus: Tel. 0800 147 111 / 09 471 977 (Finland)
 FR - ORFILA (INRS): Tél. +33 (0) 1 45 42 59 59 (France)
 DE - Giftnotruf der Charité Universitätsmedizin Berlin: Tel. +49 030 19240 (Germany)
 GR - Κέντρο Δηλητηριάσεων: Τηλ. 210 7793777 (Greece)
 HU - Egészségügyi Toxikológiai Tájékoztató Szolgálat (ETTSZ): Tel. +36 80 20 1199 (Hungary)
 IS - Eitrunarmiðstöð: Tel. 543 2222 (Iceland)
 IE - National Poisons Information Centre (NPIC): Tel. 01 8092566 / 01 8379964 (Republic of Ireland)
 LV - Latvian Poisons Information Centre: Tel. +371 67042473 (Latvia)
 LT - Apsinuodijimų Informacijos biuras: Tel. 8-5 236 2052 (Lithuania)
 LU - Giftinformationszentrum: Tel. +352 8002 5500 (Luxembourg)
 NL - Nationaal Vergiftigingen Informatie Centrum (NVIC): Tel. 030 274 88 88 (Netherlands)
 NO - Giftinformasjonen: Tel. 22 9 13 00 (Norway)
 PL - Pomorskie Centrum Toksykologii: Tel. +58 682 04 04 (Poland)
 PT - Centro de Informação Antivenenos (CIAV): Tel. 800 250 250 (Portugal)
 RO - Biroul RSI Si Informare Toxicologica: Tel. 021 318 36 06 (Romania)
 SK - Národné Toxikologické informačné centrum (NTIC): Tel. 02 5477 4166 (Slovakia)
 SI - Center za klinično toksikologijo in farmakologijo: Tel. 112 (Slovenia)
 ES - Servicio de Información Toxicológica (SIT) España: Tel.+34 91 562 04 20 (Spain)

UNBLOCKING spray 400 ml

SE - Giftinformationscentralen: Tel. 112 (Sweden)

CH - Schweizerisches Toxikologisches Informationszentrum (STIZ): Tel. +41 145 (Switzerland)

GB - National Poisons Information Service (NPIS) Tel. 0344 892 0111 (United Kingdom)

Members of the Public: NHS 111 (England), NHS 24 (Scotland) or NHS Direct (Wales)

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:

Aerosol, category 1

H222
H229

Extremely flammable aerosol.
Pressurised container: may burst if heated.

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:

H222 Extremely flammable aerosol.

H229 Pressurised container: may burst if heated.

EUH066 Repeated exposure may cause skin dryness or cracking.

Precautionary statements:

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P251 Do not pierce or burn, even after use.

P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50°C / 122°F.

P102 Keep out of reach of children.

P211 Do not spray on an open flame or other ignition source.

P501 Dispose of contents/container in accordance with local regulations.

2.3. Other hazards

UNBLOCKING spray 400 ml

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)
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics		
INDEX -	$39 \leq x < 43$	Asp. Tox. 1 H304, EUH066
EC 918-481-9		
CAS -		
REACH Reg. 01-2119457273-39-XXXX		
PROPANE		
INDEX 601-003-00-5	$19 \leq x < 23$	Flam. Gas 1A H220, Press. Gas (Liq.) H280, Classification note according to Annex VI to the CLP Regulation: U
EC 200-827-9		
CAS 74-98-6		
REACH Reg. 01-2119486944-21-0046		
Distillates (petroleum), hydrotreated light naphthenic		
INDEX 649-466-00-2	$19 \leq x < 23$	Asp. Tox. 1 H304, Classification note according to Annex VI to the CLP Regulation: L Asp. Tox. 1 H304: $\geq 40\%$
EC 265-156-6		
CAS 64742-53-6		
REACH Reg. 01-2119480375-34-XXXX		
BUTANE		
INDEX 601-004-00-0	$9 \leq x < 11$	Flam. Gas 1A H220, Press. Gas (Liq.) H280, Classification note according to Annex VI to the CLP Regulation: C, U
EC 203-448-7		
CAS 106-97-8		
REACH Reg. 01-2119474691-32-XXXX		
XYLENE		
INDEX 601-022-00-9	$5 \leq x < 7$	Flam. Liq. 3 H226, Acute Tox. 4 H312, Acute Tox. 4 H332, Eye Irrit. 2 H319, Skin Irrit. 2 H315, Classification note according to Annex VI to the CLP Regulation: C LD50 Dermal: >1700 mg/kg, STA Inhalation mists/powders: 1,5 mg/l
EC 215-535-7		
CAS 1330-20-7		
REACH Reg. 01-2119488216-32-XXXX		
Isobutane		
INDEX 601-004-00-0	$1 \leq x < 3$	Flam. Gas 1A H220, Press. Gas H280
EC 200-857-2		
CAS 75-28-5		
REACH Reg. 01-2119485395-27-XXXX		
ISOBUTYL ACETATE		

UNBLOCKING spray 400 ml

INDEX 607-026-00-7 0,5 ≤ x < 1 Flam. Liq. 2 H225, STOT SE 3 H336, EUH066, Classification note according to Annex VI to the CLP Regulation: C

EC 203-745-1

CAS 110-19-0

REACH Reg. 01-2119488971-22-XXXX

2-BUTOXYETHANOL

INDEX 603-014-00-0 0,5 ≤ x < 1 Acute Tox. 3 H331, Acute Tox. 4 H302, Eye Irrit. 2 H319, Skin Irrit. 2 H315
LD50 Oral: 1200 mg/kg, STA Inhalation mists/powders: 0,501 mg/l

EC 203-905-0

CAS 111-76-2

REACH Reg. 01-2119475108-36-XXXX

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

The product is an aerosol containing propellants. For the purposes of calculation of the health hazards, propellants are not considered (unless they have health hazards). The percentages indicated are inclusive of the propellants.

Percentage of propellants: 32,15 %

Distillates (petroleum), hydrotreated light naphthenic

* DECLL (CLP): This substance is classified according to note L of Annex VI of

CE regulation 1272/2008. Classification as a carcinogen is not necessary if one can

demonstrate that the substance contains less than 3% DMSO extract according to IP 346 measurement

"Determination of polycyclic aromatics in unused lubricating base oils and petroleum fractions

without asphaltene - dimethyl sulfoxide extraction ", Institute of Petroleum, London. This note

only applies to certain petroleum-derived compound substances contained in Part 3.

SECTION 4. First aid measures**4.1. Description of first aid measures**

EYES: Remove contact lenses, if present. Wash immediately with plenty of water for at least 15 minutes, opening the eyelids fully. If problem persists, seek medical advice.

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

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

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

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

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

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

Information not available

SECTION 5. Firefighting measures**5.1. Extinguishing media****SUITABLE EXTINGUISHING EQUIPMENT**

The extinguishing equipment should be of the conventional kind: carbon dioxide, foam, powder and water spray.

UNSUITABLE EXTINGUISHING EQUIPMENT

None in particular.

5.2. Special hazards arising from the substance or mixture

UNBLOCKING spray 400 ml**HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE**

If overheated, aerosol cans can deform, explode and be propelled considerable distances. Put a protective helmet on before approaching the fire. 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.

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**

Eliminate all sources of ignition (cigarettes, flames, sparks, etc.) from the leakage site. Send away individuals who are not suitably equipped. Wear protective gloves / protective clothing / eye protection / face protection.

6.2. Environmental precautions

Do not disperse in the environment.

6.3. Methods and material for containment and cleaning up

Use inert absorbent material to soak up leaked product. 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**

Avoid bunching of electrostatic charges. Do not spray on flames or incandescent bodies. Vapours may catch fire and an explosion may occur; vapour accumulation is therefore to be avoided by leaving windows and doors open and ensuring good cross ventilation. Do not eat, drink or smoke during use. Do not breathe spray.

7.2. Conditions for safe storage, including any incompatibilities

Store in a place where adequate ventilation is ensured, away from direct sunlight at a temperature below 50°C / 122°F, away from any combustion sources.

7.3. Specific end use(s)

Information not available

SECTION 8. Exposure controls/personal protection**8.1. Control parameters****Regulatory references:**

CZE Česká Republika Nařízení vlády č. 41/2020 Sb. Nařízení vlády, kterým se mění nařízení vlády č. 361/2007 Sb., kterým se

Carima Srl	Revision nr. 5 Dated 06/12/2022
UNBLOCKING spray 400 ml	Printed on 27/07/2023 Page n. 6/20 Replaced revision:4 (Dated: 31/08/2021)

DEU	Deutschland	stanoví podmínky ochrany zdraví při práci, ve znění pozdějších předpisů Technischen Regeln für Gefahrstoffe (TRGS 900) - Liste der Arbeitsplatzgrenzwerte und Kurzzeitwerte. MAK- und BAT-Werte-Liste 2020, Ständige Senatskommission zur Prüfung gesundheitsschädlicher Arbeitsstoffe, Mitteilung 56
ESP	España	Límites de exposición profesional para agentes químicos en España 2021
FRA	France	Valeurs limites d'exposition professionnelle aux agents chimiques en France. ED 984 - INRS
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 ``» Az innovációért és technológiáért felelős miniszter 5/2020. (II. 6.) ITM rendelethe a kémiai kóroki tényezők hatásának kitett munkavállalók egészségének és biztonságának védelméről Decreto Legislativo 9 Aprile 2008, n.81
HUN	Magyarország	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
ITA	Italia	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
PRT	Portugal	NARIADENIE VLÁDY Slovenskej republiky z 12. augusta 2020, ktorým sa mení a dopĺňa nariadenie vlády Slovenskej republiky č. 356/2006 Z. z. o ochrane zdravia zamestnancov pred rizikami súvisiacimi s expozíciou karcinogénnym a mutagénnym faktorom pri práci v znení neskorších predpisov
POL	Polska	EH40/2005 Workplace exposure limits (Fourth Edition 2020)
SVK	Slovensko	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.
GBR	United Kingdom	ACGIH 2022
EU	OEL EU	
	TLV-ACGIH	

Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics	
Predicted no-effect concentration - PNEC	
Normal value for the atmosphere	NPI

PROPANE						
Threshold Limit Value						
Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
AGW	DEU	1800	1000	7200	4000	
MAK	DEU	1800	1000	7200	4000	
VLA	ESP		1000			
TLV	GRC	1800	1000			
NDS/NDSch	POL	1800				

Distillates (petroleum), hydrotreated light naphthenic	
Predicted no-effect concentration - PNEC	
Normal value for the food chain (secondary poisoning)	9,33 mg/kg

Health - Derived no-effect level - DNEL / DMEL								
	Effects on consumers				Effects on workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Inhalation					5.4 mg/m3 8h			

BUTANE						
Threshold Limit Value						
Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
AGW	DEU	2400	1000	9600	4000	
MAK	DEU	2400	1000	9600	4000	
VLA	ESP		1000			Gases
VLEP	FRA	1900	800			
TLV	GRC	2350	1000			

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AK	HUN	2350	9400		
NDS/NDSch	POL	1900	3000		
WEL	GBR	1450	600	1810	750
WEL	GBR		4		RESP
TLV-ACGIH				1000	

XYLENE						
Threshold Limit Value						
Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
TLV	CZE	200	45,4	400	90,8	SKIN
AGW	DEU	440	100	880	200	SKIN
MAK	DEU	440	100	880	200	SKIN
VLA	ESP	221	50	442	100	SKIN
VLEP	FRA	221	50	442	100	SKIN
TLV	GRC	435	100	650	150	
AK	HUN	221		442		SKIN
VLEP	ITA	221	50	442	100	SKIN
VLE	PRT	221	50	442	100	SKIN
NDS/NDSch	POL	100		200		SKIN
NPEL	SVK	221	50	442	100	SKIN
WEL	GBR	220	50	441	100	SKIN
OEL	EU	221	50	442	100	SKIN
TLV-ACGIH			20			

Predicted no-effect concentration - PNEC			
Normal value in fresh water		327	µg/l
Normal value in marine water		327	µg/l
Normal value for fresh water sediment		12,46	mg/kg/d
Normal value for marine water sediment		12,46	mg/kg/d
Normal value of STP microorganisms		6,58	mg/l
Normal value for the terrestrial compartment		2,31	mg/kg/d

Health - Derived no-effect level - DNEL / DMEL								
Route of exposure	Effects on consumers				Effects on workers			
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral				1,6 mg/kg bw/d				
Inhalation				14,8 mg/m3			289 mg/m3	77 mg/m3
Skin				108 mg/kg bw/d				180 mg/kg bw/d

Isobutane						
Threshold Limit Value						
Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
TLV-ACGIH			800			

ISOBUTYL ACETATE					
Threshold Limit Value					
Type	Country	TWA/8h		STEL/15min	

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		mg/m3	ppm	mg/m3	ppm
TLV	CZE	950	196,65	1200	248,4
AGW	DEU	300	62	600 (C)	124 (C)
VLA	ESP	724	150		
VLEP	FRA	710	150	940	200
TLV	GRC	950	200	950	200
AK	HUN	241		723	
VLEP	ITA	241	50	723	150
VLE	PRT	241	50	723	150
NDS/NDSch	POL	240		720	
NPEL	SVK	241	50	723	150
WEL	GBR	724	150	903	187
OEL	EU	241	50	723	150
TLV-ACGIH			50		150

Predicted no-effect concentration - PNEC

Normal value in fresh water		170	µg/l
Normal value in marine water		17	µg/l
Normal value for fresh water sediment		877	µg/kg/d
Normal value for marine water sediment		87,7	µg/kg/d
Normal value of STP microorganisms		200	mg/l
Normal value for the terrestrial compartment		75,5	µg/kg/d

Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers			Effects on workers				
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral		5 mg/kg bw/d		5 mg/kg bw/d				
Inhalation	300 mg/m3		35,7 mg/m3	35,7 mg/m3	600 mg/m3	600 mg/m3	300 mg/m3	300 mg/m3
Skin	NPI	5 mg/kg bw/d	NPI	5 mg/kg bw/d	NPI	10 mg/kg bw/d	NPI	10 mg/kg bw/d

2-BUTOXYETHANOL

Threshold Limit Value

Type	Country	TWA/8h	STEL/15min	Remarks / Observations
		mg/m3	ppm	
		mg/m3	ppm	
TLV	CZE	100	20,4	200 40,8 SKIN
AGW	DEU	49	10	98 (C) 20 (C) SKIN
MAK	DEU	49	10	98 20 SKIN
VLA	ESP	98	20	245 50 SKIN
VLEP	FRA	49	10	246 50 SKIN
TLV	GRC	120	25	
AK	HUN	98		246 SKIN
VLEP	ITA	98	20	246 50 SKIN
VLE	PRT	98	20	246 50 SKIN
NDS/NDSch	POL	98		200 SKIN
NPEL	SVK	98	20	246 50 SKIN
WEL	GBR	123	25	246 50 SKIN
OEL	EU	98	20	246 50 SKIN
TLV-ACGIH		97	20	

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Predicted no-effect concentration - PNEC

Normal value in fresh water	8,8	mg/l
Normal value in marine water	880	µg/l
Normal value for fresh water sediment	34,6	mg/kg/d
Normal value for water, intermittent release	9,1	mg/l
Normal value of STP microorganisms	463	mg/l
Normal value for the food chain (secondary poisoning)	20	mg/kg
Normal value for the terrestrial compartment	2,33	mg/kg/d

Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers				Effects on workers			
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral		26,7 mg/kg bw/d		6,3 mg/kg bw/d				
Inhalation	147 mg/m3	426 mg/m3	NPI	59 mg/m3	246 mg/m3	1091 mg/m3	NPI	98 mg/m3
Skin	VND	89 mg/kg bw/d	NPI	75 mg/kg bw/d	VND	89 mg/kg bw/d	NPI	125 mg/kg bw/d

Distillates (petroleum), hydrotreated heavy naphthenic

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
VLA	ESP	5		10		
TLV	GRC	5				
AK	HUN	5				
VLEP	ITA	5				INHAL
VLE	PRT	5		10		
NDS/NDSch	POL	5				
NPEL	SVK	1		3	15	

Predicted no-effect concentration - PNEC

Normal value for the food chain (secondary poisoning)	9,33	mg/kg
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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.

HAND PROTECTION

None required.

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.

EYE PROTECTION

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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, a mask with a type AX filter combined with a type P filter should be worn (see standard EN 14387).

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.

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	aerosol	
Colour	light brown	
Odour	characteristic of solvent	
Melting point / freezing point	not available	
Initial boiling point	not available	
Flammability	flammable gas	
Lower explosive limit	not available	
Upper explosive limit	not available	
Flash point	< 0 °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	not available	
Solubility	insoluble in water	
Partition coefficient: n-octanol/water	not available	
Vapour pressure	not available	
Density and/or relative density	0,68 ÷ 0,72 kg/l	Temperature: 20 °C
Relative vapour density	not available	
Particle characteristics	not applicable	

9.2. Other information

9.2.1. Information with regard to physical hazard classes

Information not available

9.2.2. Other safety characteristics

VOC (Directive 2010/75/EU)	99,93 % - 699,47 g/litre
Explosive properties	not applicable
Oxidising properties	not applicable

SECTION 10. Stability and reactivity

UNBLOCKING spray 400 ml

10.1. Reactivity

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

ISOBUTYL ACETATE

Decomposes under the effect of heat. Attacks various types of plastic materials.

2-BUTOXYETHANOL

Decomposes under the effect of heat.

10.2. Chemical stability

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

10.3. Possibility of hazardous reactions

No hazardous reactions are foreseeable in normal conditions of use and storage.

XYLENE

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

ISOBUTYL ACETATE

Risk of explosion on contact with: strong oxidising agents. May react violently with: alkaline hydroxides, potassium tert-butoxide. Forms explosive mixtures with: air.

2-BUTOXYETHANOL

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

10.4. Conditions to avoid

Avoid overheating.

ISOBUTYL ACETATE

Avoid exposure to: sources of heat, naked flames.

2-BUTOXYETHANOL

Avoid exposure to: sources of heat, naked flames.

10.5. Incompatible materials

Strong reducing or oxidising agents, strong acids or alkalis, hot material.

ISOBUTYL ACETATE

Incompatible with: strong oxidants, nitrates, strong acids, strong bases.

2-BUTOXYETHANOL

Keep away from: strong oxidants.

10.6. Hazardous decomposition products

2-BUTOXYETHANOL

May develop: hydrogen.

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 1272/2008Metabolism, toxicokinetics, mechanism of action and other information

Information not available

Information on likely routes of exposure

XYLENE

WORKERS: inhalation; contact with the skin.

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

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

XYLENE

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

Interactive effects

XYLENE

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

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:

>2000 mg/kg

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Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics

LD50 (Dermal):	2000 mg/kg bw rat
LD50 (Oral):	> 5000 mg/kg bw rat
LC50 (Inhalation vapours):	> 4 mg/l/4h rat

PROPANE

LC50 (Inhalation mists/powders):	800000 ppm 15 min
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Distillates (petroleum), hydrotreated light naphthenic

LD50 (Dermal):	3500 mg/kg bw rabbit
LD50 (Oral):	5000 mg/kg bw rat
LC50 (Inhalation vapours):	3,85 mg/l/4h rat

BUTANE

LC50 (Inhalation mists/powders):	> 1442,738 mg/l/15min rat
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XYLENE

LD50 (Dermal):	> 1700 mg/kg rabbit
LD50 (Oral):	> 3000 mg/kg rat
LC50 (Inhalation vapours):	5000 ppm/4h rat
STA (Inhalation mists/powders):	1,5 mg/l

(figure used for calculation of the acute toxicity estimate of the mixture)

Isobutane

LC50 (Inhalation mists/powders):	> 1442,738 mg/l/15min rat
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ISOBUTYL ACETATE

LD50 (Dermal):	17400 mg/kg bw rabbit
LD50 (Oral):	13413 mg/kg bw rat
LC50 (Inhalation vapours):	30 mg/l/6h rat

2-BUTOXYETHANOL

LD50 (Oral):	1200 mg/kg Guinea pig
LC50 (Inhalation vapours):	3 mg/l/4h Rat
STA (Inhalation mists/powders):	0,501 mg/l

(figure used for calculation of the acute toxicity estimate of the mixture)

SKIN CORROSION / IRRITATION

Repeated exposure may cause skin dryness or cracking.

SERIOUS EYE DAMAGE / IRRITATION

Does not meet the classification criteria for this hazard class

RESPIRATORY OR SKIN SENSITISATION

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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

XYLENE

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

The US Environmental Protection Agency (EPA) claims that "the data were found to be inadequate for an assessment of carcinogenic potential."

REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class

STOT - SINGLE EXPOSURE

Does not meet the classification criteria for this hazard class

STOT - REPEATED EXPOSURE

Does not meet the classification criteria for this hazard class

ASPIRATION HAZARD

Excluded because the aerosol does not allow the accumulation of a significant amount of product in the mouth

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

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soil or vegetation.

12.1. Toxicity

Hydrocarbons, C10-C13, n-alkanes,
isoalkanes, cyclics, <2% aromatics
Chronic NOEC for Algae / Aquatic Plants 1000 mg/l 72 hours

BUTANE

LC50 - for Fish > 24,11 mg/l/96h

PROPANE

LC50 - for Fish 85,82 mg/l/96h

EC50 - for Crustacea 41,82 mg/l/48h

2-BUTOXYETHANOL

LC50 - for Fish 1,474 g/l

EC50 - for Crustacea 1,55 g/l

EC50 - for Algae / Aquatic Plants 911 mg/l/72h

EC10 for Crustacea 134 mg/l 21 days

Chronic NOEC for Fish 100 mg/l 21 days

Chronic NOEC for Crustacea 100 mg/l 21 days

Chronic NOEC for Algae / Aquatic Plants 88 mg/l 72 h

ISOBUTYL ACETATE

LC50 - for Fish 16,6 mg/l/96h

EC50 - for Crustacea 24,6 mg/l/48h

EC50 - for Algae / Aquatic Plants 321,5 mg/l/72h

Chronic NOEC for Crustacea 23,2 mg/l 21 days

Chronic NOEC for Algae / Aquatic Plants 1505 mg/l 72 h

Isobutane

LC50 - for Fish > 24,11 mg/l/96h

12.2. Persistence and degradability

PROPANE

Global Warming Potential (GWP): 3. Ozone Depletion Potential (ODP): 0.

Distillates (petroleum), hydrotreated light

naphthenic

Degradability: information not available

Echa sources

Hydrocarbons, C10-C13, n-alkanes,

isoalkanes, cyclics, <2% aromatics

Rapidly degradable

But failing the 10-day window (100%).

XYLENE

Solubility in water 100 - 1000 mg/l

Rapidly degradable

BUTANE

Solubility in water 0,1 - 100 mg/l

Rapidly degradable

PROPANE

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Solubility in water 0,1 - 100 mg/l

Rapidly degradable
2-BUTOXYETHANOL

Solubility in water 1000 - 10000 mg/l

Rapidly degradable
ISOBUTYL ACETATE

Solubility in water 1000 - 10000 mg/l

Rapidly degradable
Isobutane

Rapidly degradable

12.3. Bioaccumulative potential

XYLENE

Partition coefficient: n-octanol/water 3,12

BCF 25,9

BUTANE

Partition coefficient: n-octanol/water 1,09

PROPANE

Partition coefficient: n-octanol/water 1,09

2-BUTOXYETHANOL

Partition coefficient: n-octanol/water 0,81

ISOBUTYL ACETATE

Partition coefficient: n-octanol/water 2,3

BCF 15,3

12.4. Mobility in soil

XYLENE

Partition coefficient: soil/water 2,73

12.5. Results of PBT and vPvB assessment

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

12.6. 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**

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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.

Product residues are to be considered special hazardous waste.

Empty cans, even if completely emptied, must not be dispersed in the environment.

The aerosol container overheated to a temperature above 50 ° C may burst even if it contains a small residue of gas.

Disposal must take place in an authorized place and in compliance with the laws in force.

The transport of waste may be subject to ADR.

European waste catalog code (contaminated containers):

Aerosol as domestic waste is excluded from the application of the aforementioned rule.

The exhausted aerosol for professional / industrial use can be classified:

15.01.11 *: metallic packaging containing dangerous solid porous matrices, including empty pressure containers.

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

ADR / RID, IMDG, IATA: 1950

14.2. UN proper shipping name

ADR / RID: AEROSOLS

IMDG: AEROSOLS

IATA: AEROSOLS, FLAMMABLE

14.3. Transport hazard class(es)

ADR / RID: Class: 2 Label: 2.1

IMDG: Class: 2 Label: 2.1

IATA: Class: 2 Label: 2.1

**14.4. Packing group**

ADR / RID, IMDG, IATA: -

14.5. Environmental hazards

ADR / RID: NO

IMDG: NO

IATA: NO

14.6. Special precautions for user

ADR / RID: HIN - Kemler: --

Special provision: -

Limited
Quantities: 1
L

Tunnel
restriction
code: (D)

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IMDG:	EMS: F-D, S-U	Limited Quantities: 1 L	
IATA:	Cargo:	Maximum quantity: 150 Kg	Packaging instructions: 203
	Passengers:	Maximum quantity: 75 Kg	Packaging instructions: 203
	Special provision:	A145, A167, A802	

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: P3a

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

<u>Product</u>	
Point	40

<u>Contained substance</u>	
Point	75

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

not applicable

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

None

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

None

Substances subject to the Rotterdam Convention:

None

Substances subject to the Stockholm Convention:

None

Healthcare controls

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Information not available

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. Gas 1A	Flammable gas, category 1A
Aerosol 1	Aerosol, category 1
Aerosol 3	Aerosol, category 3
Flam. Liq. 2	Flammable liquid, category 2
Flam. Liq. 3	Flammable liquid, category 3
Press. Gas	Pressurised gas
Press. Gas (Liq.)	Liquefied gas
Acute Tox. 3	Acute toxicity, category 3
Acute Tox. 4	Acute toxicity, category 4
Asp. Tox. 1	Aspiration hazard, 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
H220	Extremely flammable gas.
H222	Extremely flammable aerosol.
H229	Pressurised container: may burst if heated.
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H280	Contains gas under pressure; may explode if heated.
H331	Toxic if inhaled.
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H332	Harmful if inhaled.
H304	May be fatal if swallowed and enters airways.
H319	Causes serious eye irritation.
H315	Causes skin irritation.
H336	May cause drowsiness or dizziness.
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

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- IMO: International Maritime Organization
- INDEX: Identifier in Annex VI of CLP
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PBT: Persistent bioaccumulative and toxic as REACH Regulation
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PNEC: Predicted no effect concentration
- REACH: Regulation (EC) 1907/2006
- RID: Regulation concerning the international transport of dangerous goods by train
- TLV: Threshold Limit Value
- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TWA: Time-weighted average exposure limit
- TWA STEL: Short-term exposure limit
- VOC: Volatile organic Compounds
- vPvB: Very Persistent and very Bioaccumulative as for REACH Regulation
- WGK: Water hazard classes (German).

GENERAL BIBLIOGRAPHY

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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 (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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- Patty - Industrial Hygiene and Toxicology
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- 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 / 02 / 03 / 08 / 09 / 11 / 12 / 15 / 16.