Safety Data Sheet

According to Annex II to REACH - Regulation 2015/830

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

1.1. Product identifier

Code: **M8101, M8162**

Product name **BRILLO - CERA SILICONICA**

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

Intended use **silicone wax for marble and granite. Professional use only.**

Uses related to the substances:

Identified Uses	Industrial	Professional	Consumer
METHYLETHYLKETONE	-	ERC: 8a, 8d. PROC: 1, 10, 11, 13, 15, 19, 2, 3, 4, 5, 8a, 8b.	ERC: 8a, 8d. PC: 1, 15, 18, 23, 24, 31, 34, 4, 8, 9a, 9b.
TETRACHLOROETHYLENE	ERC: 2. PROC: 1, 14, 15, 2, 3, 4, 8a, 8b, 9.	ERC: 7. PROC: 2, 3, 4, 8a.	-
XYLENE	-	ERC: 8a, 8d. PROC: 1, 10, 11, 13, 15, 19, 2, 3, 4, 5, 8a, 8b.	ERC: 8a, 8d. PC: 1, 15, 18, 23, 24, 31, 34, 4, 8, 9a, 9b, 9c.

1.3. Details of the supplier of the safety data sheet

Name **ILPA ADESIVI SRL**

Full address **Via Ferorelli, 4**

District and Country **70132 BARI (BARI)**
ITALIA

Tel. + 39 0805383837

Fax + 39 0805377807

e-mail address of the competent person

responsible for the Safety Data Sheet **laboratorio@ilpa.it**

1.4. Emergency telephone number

For urgent inquiries refer to **+ 39 0808974667 (Technical support - 8,00 - 17,00 - LUN-VEN; MON-FRI)(Italian time zone)**
Safety Executive (HSE) Chemicals Regulation Directorate 5S.1 Redgrave Court, Merton Road, Bootle, Merseyside. L20 7HS.
Phone: +44 151 9513317

SECTION 2. Hazards identification

2.1. Classification of the substance or mixture

The product is classified as hazardous pursuant to the provisions set forth in (EC) Regulation 1272/2008 (CLP) (and subsequent amendments and supplements). The product thus requires a safety datasheet that complies with the provisions of (EU) Regulation 2015/830.
Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet.

Hazard classification and indication:

Flammable liquid, category 2	H225	Highly flammable liquid and vapour.
Carcinogenicity, category 2	H351	Suspected of causing cancer.
Eye irritation, category 2	H319	Causes serious eye irritation.
Skin irritation, category 2	H315	Causes skin irritation.
Skin sensitization, category 1	H317	May cause an allergic skin reaction.
Specific target organ toxicity - single exposure, category 3	H336	May cause drowsiness or dizziness.
Hazardous to the aquatic environment, chronic toxicity, category 2	H411	Toxic to aquatic life with long lasting effects.

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.
H351	Suspected of causing cancer.
H319	Causes serious eye irritation.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H336	May cause drowsiness or dizziness.
H411	Toxic to aquatic life with long lasting effects.

Precautionary statements:

P101	If medical advice is needed, have product container or label at hand.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233	Keep container tightly closed.
P280	Wear protective gloves / protective clothing / eye protection / face protection.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P308+P313	IF exposed or concerned: Get medical advice / attention.

Contains: TETRACHLOROETHYLENE

METHYL ETHYL KETONE

HYDROCARBONS, C9, AROMATICS

Product not intended for uses provided for by Dir. 2004/42/CE.

2.3. Other hazards

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

SECTION 3. Composition/information on ingredients

3.2. Mixtures

Contains:

Identification	x = Conc. %	Classification 1272/2008 (CLP)
TETRACHLOROETHYLENE		
CAS 127-18-4 EC 204-825-9 INDEX 602-028-00-4 Reg. no. 01-2119475329-28	70 ≤ x < 74	Carc. 2 H351, Eye Irrit. 2 H319, Skin Irrit. 2 H315, Skin Sens. 1 H317, STOT SE 3 H336, Aquatic Chronic 2 H411
METHYL ETHYL KETONE		
CAS 78-93-3 EC 201-159-0 INDEX 606-002-00-3 Reg. no. 01-2119457290-43	13,5 ≤ x < 15	Flam. Liq. 2 H225, Eye Irrit. 2 H319, STOT SE 3 H336, EUH066
HYDROCARBONS, C9, AROMATICS		
CAS - EC 918-668-5 INDEX - Reg. no. 01-2119455851-35	1 ≤ x < 1,5	Flam. Liq. 3 H226, Asp. Tox. 1 H304, STOT SE 3 H335, STOT SE 3 H336, Aquatic Chronic 2 H411, EUH066
ETHYL ACETATE		
CAS 141-78-6 EC 205-500-4 INDEX 607-022-00-5 Reg. no. 01-2119475103-46	0,35 ≤ x < 0,4	Flam. Liq. 2 H225, Eye Irrit. 2 H319, STOT SE 3 H336, EUH066
XYLENE (MIXTURE OF ISOMERS)		
CAS 1330-20-7 EC 215-535-7 INDEX 601-022-00-9 Reg. no. 01-2119488216-32	0,25 ≤ x < 0,3	Flam. Liq. 3 H226, Acute Tox. 4 H312, Acute Tox. 4 H332, Asp. Tox. 1 H304, STOT RE 2 H373, Eye Irrit. 2 H319, Skin Irrit. 2 H315, STOT SE 3 H335, Classification note/notes according to Annex VI to the CLP Regulation: C
N-BUTYL ACETATE		

CAS 123-86-4 0,15 ≤ x < 0,2 Flam. Liq. 3 H226, STOT SE 3 H336, EUH066
EC 204-658-1
INDEX 607-025-00-1
Reg. no. 01-2119485493-29

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

SECTION 4. First aid measures

4.1. Description of first aid measures

EYES: Remove contact lenses, if present. Wash immediately with plenty of water for at least 15 minutes, opening the eyelids fully. If problem persists, seek medical advice.
SKIN: Remove contaminated clothing. Rinse skin with a shower immediately. Get medical advice/attention immediately. Wash contaminated clothing before using it again.
INHALATION: Remove to open air. If the subject stops breathing, administer artificial respiration. Get medical advice/attention immediately.
INGESTION: Get medical advice/attention immediately. Do not induce vomiting. Do not administer anything not explicitly authorised by a doctor.

PROTECTIVE MEASURES FOR THE FIRST RESCUE WORKERS: for PPE (personal protection equipment) required for first aid refer to section 8.2 of this safety data sheet.

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
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)

No use other than specified in Section 1.2 of this safety data sheet.

SECTION 8. Exposure controls/personal protection

8.1. Control parameters

Regulatory References:

DEU	Deutschland	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 2019
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 μεταλλαξιγόνους παράγοντες κατά την εργασία``»
HRV	Hrvatska	Pravilnik o izmjenama i dopunama Pravilnika o zaštiti radnika od izloženosti opasnimkemikalijama na radu, graničnim vrijednostima izloženosti i biološkim graničnim vrijednostima (NN 1/2021)
ITA	Italia	Decreto Legislativo 9 Aprile 2008, n.81
NLD	Nederland	Arbeidsomstandighedenregeling. Lijst van wettelijke grenswaarden op grond van de artikelen 4.3, eerste lid, en 4.16, eerste lid, van het Arbeidsomstandighedenbesluit
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
ROU	România	Hotararea 157/2020 pentru modificarea Hotărârii Guvernului nr. 1.218/2006 privind stabilirea cerinţelor minime de securitate şi sănătate în muncă pentru asigurarea protecţiei lucrătorilor împotriva riscurilor legate de prezenţa agenţilor chimici, precum şi pentru modificarea şi completarea Hotărârii Guvernului nr. 1.093/2006 privind stabilirea cerinţelor minime de securitate şi sănătate pentru protecţia lucrătorilor împotriva riscurilor legate de expunerea la agenţi cancerigeni sau mutageni la locul de muncă
GBR	United Kingdom	EH40/2005 Workplace exposure limits (Fourth Edition 2020)
EU	OEL EU	Directive (EU) 2019/1831; Directive (EU) 2019/130; Directive (EU) 2019/983; Directive (EU) 2017/2398; Directive (EU) 2017/164; Directive 2009/161/EU; Directive 2006/15/EC; Directive 2004/37/EC; Directive 2000/39/EC; Directive 98/24/EC; Directive 91/322/EEC.
	TLV-ACGIH	ACGIH 2020

TETRACHLOROETHYLENE

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
AGW	DEU	69	10	138	20	SKIN
VLA	ESP	138	20	275	40	SKIN
VLEP	FRA	138	20	275	40	
TLV	GRC	138	20	275	40	SKIN
GVI/KGVI	HRV	138	20	275	40	SKIN
TGG	NLD	138		275		SKIN
VLE	PRT	138	20	275	40	SKIN
TLV	ROU	50	7	100	14	SKIN
WEL	GBR	138	20	275	40	SKIN
OEL	EU	138	20	275	40	SKIN
TLV-ACGIH		170	25	678	100	

Predicted no-effect concentration - PNEC		
Normal value in fresh water	0,051	mg/l
Normal value in marine water	0,0051	mg/l
Normal value for fresh water sediment	0,903	mg/kg/d
Normal value for marine water sediment	0,0903	mg/kg/d
Normal value for water, intermittent release	364	mg/l

Normal value of STP microorganisms	11,2	mg/l
Normal value for the terrestrial compartment	0,01	mg/kg/d

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
Oral			VND	1,3 mg/kg bw/d				
Inhalation	VND	138 mg/m3	VND	34,5 mg/m3	VND	275 mg/m3	VND	138 mg/m3
Skin			VND	23 mg/kg bw/d			VND	39,4 mg/kg bw/d

METHYL ETHYL KETONE

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
AGW	DEU	600	200	600	200	SKIN
MAK	DEU	600	200	600	200	SKIN
VLA	ESP	600	200	900	300	
VLEP	FRA	600	200	900	300	SKIN
TLV	GRC	600	200	900	300	
GVI/KGVI	HRV	600	200	900	300	
VLEP	ITA	600	200	900	300	
TGG	NLD	590		500		SKIN
VLE	PRT	600	200	900	300	
TLV	ROU	600	200	900	300	
WEL	GBR	600	200	899	300	SKIN
OEL	EU	600	200	900	300	
TLV-ACGIH		590	200	885	300	

Predicted no-effect concentration - PNEC		
Normal value in fresh water	55,8	mg/l
Normal value in marine water	55,8	mg/l
Normal value for fresh water sediment	284,74	mg/kg/d
Normal value for marine water sediment	284,74	mg/kg/d
Normal value for water, intermittent release	55,8	mg/l
Normal value of STP microorganisms	709	mg/l
Normal value for the food chain (secondary poisoning)	1000	mg/kg
Normal value for the terrestrial compartment	22,5	mg/kg/d

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
Oral			VND	31 mg/kg bw/d				
Inhalation			VND	106 mg/m3			VND	600 mg/m3
Skin			VND	412 mg/kg bw/d			VND	1161 mg/kg bw/d

HYDROCARBONS, C9, AROMATICS

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
OEL	EU	100	19			

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
Oral			VND	11 mg/kg bw/d				
Inhalation			VND	32 mg/m3			VND	150 mg/m3
Skin			VND	11 mg/kg bw/d			VND	25 mg/kg bw/d

ETHYL ACETATE

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
AGW	DEU	730	200	1460	400	
MAK	DEU	750	200	1500	400	
VLA	ESP	734	200	1468	400	
VLEP	FRA	734	200	1468	400	
TLV	GRC	734	200	1468	400	
GVI/KGVI	HRV	734	200	1468	400	
TGG	NLD	734		1468		
VLE	PRT	734	200	1468	400	
TLV	ROU	400	111	500	139	
WEL	GBR	734	200	1468	400	
OEL	EU	734	200	1468	400	
TLV-ACGIH		1441	400			

Predicted no-effect concentration - PNEC

Normal value in fresh water	0,24	mg/l
Normal value in marine water	0,024	mg/l
Normal value for fresh water sediment	1,15	mg/kg/d
Normal value for marine water sediment	0,115	mg/kg/d
Normal value for water, intermittent release	1,65	mg/l
Normal value of STP microorganisms	650	mg/l
Normal value for the food chain (secondary poisoning)	200	mg/kg
Normal value for the terrestrial compartment	0,148	mg/kg/d
Normal value for the atmosphere	NPI	

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
Oral			VND	4,5 mg/kg bw/d				

Inhalation	734 mg/m3	734 mg/m3	367 mg/m3	367 mg/m3	1468 mg/m3	1468 mg/m3	734 mg/m3	734 mg/m3
Skin			VND	37 mg/kg bw/d			VND	63 mg/kg bw/d

XYLENE (MIXTURE OF ISOMERS)

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
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	
GVI/KGVI	HRV	221	50	442	100	SKIN
VLEP	ITA	221	50	442	100	SKIN
TGG	NLD	210		442		SKIN
VLE	PRT	221	50	442	100	SKIN
TLV	ROU	221	50	442	100	SKIN
WEL	GBR	220	50	441	100	SKIN
OEL	EU	221	50	442	100	SKIN
TLV-ACGIH		434	100	651	150	

Predicted no-effect concentration - PNEC		
Normal value in fresh water	0,327	mg/l
Normal value in marine water	0,327	mg/l
Normal value for fresh water sediment	12,46	mg/kg/d
Normal value for marine water sediment	12,46	mg/kg/d
Normal value for water, intermittent release	0,327	mg/l
Normal value of STP microorganisms	6,58	mg/l
Normal value for the terrestrial compartment	2,31	mg/kg/d

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
Oral			VND	1,6 mg/kg bw/d				
Inhalation	174 mg/m3	174 mg/m3	VND	14,8 mg/m3	289 mg/m3	289 mg/m3	VND	77 mg/m3
Skin			VND	108 mg/kg bw/d			VND	180 mg/kg bw/d

N-BUTYL ACETATE

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
AGW	DEU	300	62	600 (C)	124 (C)	
VLA	ESP	724	150	965	200	
VLEP	FRA	710	150	940	200	
TLV	GRC	710	150	950	200	

GVI/KGVI	HRV	241	50	723	150
TGG	NLD	150			
VLE	PRT	241	50	723	150
TLV	ROU	715	150	950	200
WEL	GBR	724	150	966	200
OEL	EU	241	50	723	150
TLV-ACGIH			50		150

Predicted no-effect concentration - PNEC		
Normal value in fresh water	0,18	mg/l
Normal value in marine water	0,018	mg/l
Normal value for fresh water sediment	0,981	mg/kg/d
Normal value for marine water sediment	0,0981	mg/kg/d
Normal value for water, intermittent release	0,36	mg/l
Normal value of STP microorganisms	35,6	mg/l
Normal value for the terrestrial compartment	0,0903	mg/kg/d

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	859,7 mg/m3	859,7 mg/m3	102,34 mg/m3	102,34 mg/m3	960 mg/m3	960 mg/m3	480 mg/m3	480 mg/m3

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.

8.2. Exposure controls

As the use of adequate technical equipment must always take priority over personal protective equipment, make sure that the workplace is well aired through effective local aspiration.
When choosing personal protective equipment, ask your chemical substance supplier for advice.
Personal protective equipment must be CE marked, showing that it complies with applicable standards.

Provide an emergency shower with face and eye wash station.

HAND PROTECTION
Protect hands with category III work gloves (see standard EN 374).
The following should be considered when choosing work glove material: compatibility, degradation, failure time and permeability.
The work gloves' resistance to chemical agents should be checked before use, as it can be unpredictable. The gloves' wear time depends on the duration and type of use.

SKIN PROTECTION
Wear category II professional long-sleeved overalls and safety footwear (see Regulation 2016/425 and standard EN ISO 20344). Wash body with soap and water after removing protective clothing.

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

EYE PROTECTION

Wear airtight protective goggles (see standard EN 166).

RESPIRATORY PROTECTION
If the threshold value (e.g. TLV-TWA) is exceeded for the substance or one of the substances present in the product, wear a mask with a type AX filter, whose limit of use will be defined by the manufacturer (see standard EN 14387). In the presence of gases or vapours of various kinds and/or gases or vapours containing particulate (aerosol sprays, fumes, mists, etc.) combined filters are required.
Respiratory protection devices must be used if the technical measures adopted are not suitable for restricting the worker's exposure to the threshold values considered. The protection provided by masks is in any case limited.
If the substance considered is odourless or its olfactory threshold is higher than the corresponding TLV-TWA and in the case of an emergency, wear open-circuit compressed air breathing apparatus (in compliance with standard EN 137) or external air-intake breathing apparatus (in compliance with standard EN 138). For a correct choice of respiratory protection device, see standard EN 529.

ENVIRONMENTAL EXPOSURE CONTROLS
The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.

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

Appearance	liquid	
Colour	opalescent	
Odour	characteristic of solvent	
Odour threshold	Not available	Concentration:27 ppm (DOW) Substance:TETRACHLOROETHYLENE
pH	Not applicable	
Melting point / freezing point	Not available	Substance:TETRACHLOROETHYLENE Temperature:-22 ° C (101.3 kPa, DOW)
Initial boiling point	> 35 °C	
Boiling range	Not available	
Flash point	60 ≤ T ≤ 23 °C	
Evaporation rate	Not available	Concentration:1.5 (butyl acetate = 1, DOW) Substance:TETRACHLOROETHYLENE
Flammability (solid, gas)	not applicable	
Lower inflammability limit	Not available	
Upper inflammability limit	Not available	
Lower explosive limit	Not available	Concentration:1.8 Vol% (NIOSH) Substance:METHYL ETHYL KETONE
Upper explosive limit	Not available	Concentration:11.5 Vol% (NIOSH) Substance:METHYL ETHYL KETONE
Vapour pressure	Not available	Concentration:2.5 kPa (25 ° C) Substance:TETRACHLOROETHYLENE
Vapour density	Not available	Concentration:5.76 (air = 1) Substance:TETRACHLOROETHYLENE
Relative density	1,27 g/ml	
Solubility	insoluble in water	
Partition coefficient: n-octanol/water	Not available	Concentration:2.53 Log Pow (23 ° C) Substance:TETRACHLOROETHYLENE
Auto-ignition temperature	Not available	Substance:TETRACHLOROETHYLENE

		Temperature:No (DOW)
Decomposition temperature	Not available	Substance:TETRACHLOROETHYLENE Temperature:> 150 ° C
Viscosity	0,844 mPas (dynamic at 25°C)	Substance:TETRACHLOROETHYLENE
Explosive properties	Product does not present an explosion hazard.	Substance:TETRACHLOROETHYLENE
Oxidising properties	Non oxidizing product	Substance:TETRACHLOROETHYLENE

9.2. Other information

VOC (Directive 2010/75/EC) :	85,91 % - 1 091,08 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.

TETRACHLOROETHYLENE

Decomposes at temperatures above 150°C/302°F.Decomposes if exposed to: UV rays,moisture.

METHYL ETHYL KETONE

Reacts with: light metals,strong oxidants.Attacks various types of plastic materials.Decomposes under the effect of heat.

ETHYL ACETATE

Decomposes slowly into acetic acid and ethanol under the effect of light, air and water.

N-BUTYL ACETATE

Decomposes on contact with: water.

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.

TETRACHLOROETHYLENE

Risk of explosion on contact with: alkaline metals,aluminium,alkaline hydroxides,sodium amides.May react violently with: strong bases,strong oxidising agents,alkaline earth metals,light metals,metal powders,zinc oxide.

METHYL ETHYL KETONE

May form peroxides with: air,light,strong oxidising agents.Risk of explosion on contact with: hydrogen peroxide,nitric acid,sulphuric acid.May react

dangerously with: oxidising agents,trichloromethane,alkalis.Forms explosive mixtures with: air.

ETHYL ACETATE

Risk of explosion on contact with: alkaline metals,hydrides,oleum.May react violently with: fluorine,strong oxidising agents,chlorosulphuric acid,potassium tert-butoxide.Forms explosive mixtures with: air.

XYLENE (MIXTURE OF ISOMERS)

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

N-BUTYL ACETATE

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

10.4. Conditions to avoid

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

METHYL ETHYL KETONE

Avoid exposure to: sources of heat.

ETHYL ACETATE

Avoid exposure to: light,sources of heat,naked flames.

N-BUTYL ACETATE

Avoid exposure to: moisture,sources of heat,naked flames.

10.5. Incompatible materials

METHYL ETHYL KETONE

Incompatible with: strong oxidants,inorganic acids,ammonia,copper,chloroform.

ETHYL ACETATE

Incompatible with: acids,bases,strong oxidants,aluminium,nitrates,chlorosulphuric acid.Incompatible materials: plastic materials.

N-BUTYL ACETATE

Incompatible with: water,nitrates,strong oxidants,acids,alkalis,zinc.

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.

TETRACHLOROETHYLENE

May develop: hydrogen chloride,phosgenes,chlorine,ethane tetrachloride,chlorine compounds.

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 toxicological effects

Metabolism, toxicokinetics, mechanism of action and other information

Information not available

Information on likely routes of exposure

TETRACHLOROETHYLENE

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

XYLENE (MIXTURE OF ISOMERS)

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

N-BUTYL ACETATE

WORKERS: inhalation; contact with the skin.

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

TETRACHLOROETHYLENE

Has a toxic effect on the central and peripheral nervous system, liver, kidneys and heart; the mucous membranes and the skin are irritated.

XYLENE (MIXTURE OF ISOMERS)

Toxic effect on the central nervous system (encephalopathy); irritating for the skin, conjunctiva, cornea and respiratory apparatus.

N-BUTYL ACETATE

In humans, the substance's vapours cause irritation of the eyes and nose. In the event of repeated exposure, skin irritation, dermatitis (dryness and cracking of the skin) and keratitis appear.

Interactive effects

XYLENE (MIXTURE OF ISOMERS)

Intake of alcohol interferes with the metabolism of the substance, inhibiting it. Ethanol consumption (0.8 g/kg) before a 4-hour exposure to xylene vapours (145 and 280 ppm) causes a 50% reduction in the excretion of methyl hippuric acid, whereas the concentration of xylenes in the blood increases approx.

1.5-2 times. At the same time there is an increase in the secondary side effects of the ethanol. The metabolism of the xylenes is increased by phenobarbital and 3-methyl-colantrene type enzyme inducers. Aspirin and xylenes mutually inhibit their conjugation with the glycine, which results in a decrease in urinary excretion of methyl hippuric acid. Other industrial products can interfere with the metabolism of xylenes.

N-BUTYL ACETATE

A case of acute intoxication been reported involving a 33 year old worker while cleaning a tank with a preparation containing xylenes, butyl acetate and ethylene glycol acetate. The person had irritation of the conjunctiva and upper respiratory tract, drowsiness and motor coordination disorders, which disappeared within 5 hours. The symptoms are attributed to poisoning by mixed xylenes and butyl acetate, with a possible synergistic effect responsible for the neurological effects. Cases of vacuolar keratitis are reported in workers exposed to a mixture of butyl acetate and isobutanol vapours, but with uncertainty concerning the responsibility of a particular solvent (INRC, 2011).

ACUTE TOXICITY

ATE (Inhalation) of the mixture:
Not classified (no significant component)
ATE (Oral) of the mixture:
Not classified (no significant component)
ATE (Dermal) of the mixture:
Not classified (no significant component)

XYLENE (MIXTURE OF ISOMERS)

LD50 (Oral) 3523 mg/kg Rat (equivalent or similar to EU Method B.1)

LD50 (Dermal) 4200 mg/kg Rabbit (Industrial Medicine 39, 215-200, 1970)

LC50 (Inhalation) 26 mg/l/4h Rat(equivalent or similar to EU Method B.2)

TETRACHLOROETHYLENE

LD50 (Oral) 3005 mg/kg Rat (Equivalent or similar to OECD Guideline 401)

LC50 (Inhalation) 3786 ppm/4h Rat (Equivalent or similar to OECD Guideline 403)

METHYL ETHYL KETONE

LD50 (Oral) 2193 mg/kg Rat (read-across from supporting substance, Equivalent or similar to OECD Guideline 423)

LD50 (Dermal) 6480 mg/kg Rabbit (Shell Chemical Company. Vol. MSDS-5390-4)

LC50 (Inhalation) 5000 ppm Rat (Rif. SDS Brenntag)

ETHYL ACETATE

LD50 (Oral) 4934 mg/kg Rabbit (Equivalent to OECD 401)

LD50 (Dermal) 20000 mg/kg Rabbit (Publication Am Ind Hyg Ass J, 23, 95)

LC50 (Inhalation) 22,5 mg/l/6h Rat (40 CFR Part 799 (58 FR 40262))

N-BUTYL ACETATE

LD50 (Oral) 10760 mg/kg Rat (Equivalent or similar to OECD Guideline 423)

LD50 (Dermal) 14112 mg/kg Rabbit (Equivalent or similar to OECD Guideline 402)

LC50 (Inhalation) 5,3 mg/l/4h Rat (Equivalent or similar to OECD Guideline 423)

HYDROCARBONS, C9, AROMATICS

LD50 (Oral) 3492 mg/kg Rat (Study report ECHA)

LD50 (Dermal) 3160 mg/kg Rabbit (Equivalent or similar to OECD Guideline 402)

LC50 (Inhalation) 6193 ppm/4h Rat (Equivalent or similar to OECD Guideline 403, GLP)

SKIN CORROSION / IRRITATION

Causes skin irritation

SERIOUS EYE DAMAGE / IRRITATION

Causes serious eye irritation

RESPIRATORY OR SKIN SENSITISATION

Sensitising for the skin

GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

CARCINOGENICITY

Suspected of causing cancer

TETRACHLOROETHYLENE

Classified in Group 2A (probable human carcinogen) by the International Agency for Research on Cancer (IARC).
Epidemiological studies show evidence of association between exposure to the substance and presence of various types of cancers: bladder cancer, non-Hodgkin's lymphomas and multiple myeloma (US EPA, 2014).
Classified as a "probable carcinogen" by the US National Toxicology Program (NTP).

XYLENE (MIXTURE OF ISOMERS)

Classified in Group 3 (not classifiable as a human carcinogen) by the International Agency for Research on Cancer (IARC).
The US Environmental Protection Agency (EPA) affirms that "the data is inadequate for an assessment of the carcinogenic potential".

REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class

STOT - SINGLE EXPOSURE

May cause drowsiness or dizziness

STOT - REPEATED EXPOSURE

Does not meet the classification criteria for this hazard class

ASPIRATION HAZARD

Does not meet the classification criteria for this hazard class

SECTION 12. Ecological information

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

12.1. Toxicity

XYLENE (MIXTURE OF ISOMERS)	
LC50 - for Fish	2,6 mg/l/96h Oncorhynchus mykiss (OECD TG 203)
Chronic NOEC for Fish	1,3 mg/l 56d Oncorhynchus mykiss (Appl. Sci. Branch, Eng. Res. Cent. Denver, CO: 15p.)
Chronic NOEC for Crustacea	1,17 mg/l 7d Ceriodaphnia dubia (Ecotoxicology and Environmental Safety 39, 136-146)
TETRACHLOROETHYLENE	
LC50 - for Fish	5 mg/l/96h Oncorhynchus mykiss (Bulletin of Environmental Contamination and Toxicology 28 (1), 7- 10)
EC50 - for Crustacea	8,5 mg/l/48h Daphnia magna (ASTM 1980)
EC50 - for Algae / Aquatic Plants	3,64 mg/l/72h Chlamydomonas reinhardtii (Environmental Science Pollution Research International 1; 223-228)
Chronic NOEC for Fish	234 mg/l Jordanella floridae (Archives of Environmental Contamination and Toxicology 20, 94-102)
Chronic NOEC for Crustacea	0,51 mg/l Daphnia magna (ASTM Draft No. 4)
METHYL ETHYL KETONE	
LC50 - for Fish	2993 mg/l/96h Pimephales promelas (OECD Guideline 203, GLP)
EC50 - for Crustacea	308 mg/l/48h Daphnia magna (OECD Guideline 202, GLP)
EC50 - for Algae / Aquatic Plants	1972 mg/l/72h Selenastrum capricornutum (OECD Guideline 201, GLP)
ETHYL ACETATE	
LC50 - for Fish	230 mg/l/96h Pimephales promelas (US EPA method E03-05)
EC50 - for Crustacea	165 mg/l/48h Dapnia (Rif. SDS fornitore)
Chronic NOEC for Crustacea	100 mg/l Scenedesmus subspicatus (OECD Guideline 201, GLP)

N-BUTYL ACETATE

LC50 - for Fish	18 mg/l/96h Pimephales promelas (Equivalent or similar to OECD Guideline 203)
EC50 - for Crustacea	44 mg/l/48h Daphnia sp. (Publication, 1959, no guideline followed)
EC50 - for Algae / Aquatic Plants	648 mg/l/72h Desmodesmus subspicatus (Umweltbundesamt - German Federal Environment Agency)
Chronic NOEC for Crustacea	23 mg/l Daphnia magna, 21 d (Read-across from supporting substance, OECD Guideline 211)

HYDROCARBONS, C9, AROMATICS

LC50 - for Fish	9,2 mg/l/96h Oncorhynchus mykiss (OECD Guideline 203, GLP)
EC50 - for Crustacea	3,2 mg/l/48h Daphnia magna (OECD Guideline 202, GLP)
EC50 - for Algae / Aquatic Plants	2,6 mg/l/72h Raphidocelis subcapitata (OECD Guideline 201, GLP)

12.2. Persistence and degradability

XYLENE (MIXTURE OF ISOMERS)

Solubility in water	100 - 1000 Handbook of aqueous solubility data. mg/l

Rapidly degradable
OECD Guideline 301 F, GLP

TETRACHLOROETHYLENE

Solubility in water	150 mg/l

NOT rapidly degradable

Modified shake flask closed bottle biodegradation test

METHYL ETHYL KETONE

Solubility in water	> 10000 mg/l

Rapidly degradable
(OECD Guideline 301 D, GLP)

ETHYL ACETATE

Solubility in water	> 10000 mg/l

Rapidly degradable
(Publication JWPCF 46(1), p63-77)

N-BUTYL ACETATE

Solubility in water	1000 - 10000 mg/l

Rapidly degradable
OECD Guideline 301 D

HYDROCARBONS, C9, AROMATICS

Rapidly degradable
Biodegradazione 78% in 28 d (OECD Guideline 301 F)

12.3. Bioaccumulative potential

XYLENE (MIXTURE OF ISOMERS)

Partition coefficient: n-octanol/water	3,12 American Chemical Society, Washington DC
BCF	25,9 Appl. Sci. Branch, Eng. Res. Cent. Denver, CO: 15p.

TETRACHLOROETHYLENE

Partition coefficient: n-octanol/water	2,53
BCF	49

METHYL ETHYL KETONE

Partition coefficient: n-octanol/water	0,3

ETHYL ACETATE

Partition coefficient: n-octanol/water	0,68
BCF	30

N-BUTYL ACETATE

Partition coefficient: n-octanol/water	2,3 a 25 °C (Metodo OECD TG 117)
BCF	15,3

12.4. Mobility in soil

XYLENE (MIXTURE OF ISOMERS)

Partition coefficient: soil/water	2,73 equivalent or similar to OECD Guideline 121

TETRACHLOROETHYLENE

Partition coefficient: soil/water	2,15

N-BUTYL ACETATE

Partition coefficient: soil/water	< 3

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 ≥ than 0,1%.

12.6. Other adverse effects

Information not available

SECTION 13. Disposal considerations

13.1. Waste treatment methods

Reuse, when possible. Product residues should be considered special hazardous waste. The hazard level of waste containing this product should be evaluated according to applicable regulations.
Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations.
Waste transportation may be subject to ADR restrictions.
CONTAMINATED PACKAGING

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

SECTION 14. Transport information

14.1. UN number

ADR / RID, IMDG, IATA: 1993

14.2. UN proper shipping name

ADR / RID:	FLAMMABLE LIQUID, N.O.S. (Contens: TETRACHLOROETHYLENE, METHYL ETHYL KETONE, HYDROCARBONS, C9, AROMATICS) MIXTURE
IMDG:	FLAMMABLE LIQUID, N.O.S. (Contens: TETRACHLOROETHYLENE, METHYL ETHYL KETONE, HYDROCARBONS, C9, AROMATICS) MIXTURE
IATA:	FLAMMABLE LIQUID, N.O.S. (Contens: TETRACHLOROETHYLENE, METHYL ETHYL KETONE, HYDROCARBONS, C9, AROMATICS) MIXTURE

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:	Environmentally Hazardous
IMDG:	Marine Pollutant
IATA:	NO

For Air transport, environmentally hazardous mark is only mandatory for UN 3077 and UN 3082.

14.6. Special precautions for user

ADR / RID:	HIN - Kemler: 33	Limited Quantities: 1 L	Tunnel restriction code: (D/E)
	Special provision: -		
IMDG:	EMS: F-E, S-E	Limited Quantities: 1 L	
IATA:	Cargo:	Maximum quantity: 60 L	Packaging instructions: 364
	Pass.:	Maximum quantity: 5 L	Packaging instructions: 353
	Special provision:	A3	

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

Information not relevant

SECTION 15. Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Seveso Category - Directive 2012/18/EC: P5c-E2

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

Product

Point	3. Liquid substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/ 2008: (a) hazard classes 2.1 to 2.4, 2.6 and 2.7, 2.8 types A and B, 2.9, 2.10, 2.12, 2.13 categories 1 and 2, 2.14 categories 1 and 2, 2.15 types A to F; (b) hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10; (c) hazard class 4.1; (d) hazard class 5.1. 40. Substances classified as flammable gases category 1 or 2, flammable liquids categories 1, 2 or 3, flammable solids category 1 or 2, substances and mixtures which, in contact with water, emit flammable gases, category 1, 2 or 3, pyrophoric liquids category 1 or pyrophoric solids category 1, regardless of whether they appear in Part 3 of Annex VI to that Regulation or not.

Contained substance

Point	75	TETRACHLOROETHYLENE Reg. no.: 01-2119475329-28
Point	75	XYLENE (MIXTURE OF ISOMERS) Reg. no.: 01-2119488216-32

Regulation (EC) No. 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 ≥ than 0,1%.

Substances subject to authorisation (Annex XIV REACH)

None

Substances subject to exportation reporting pursuant to (EC) Reg. 649/2012:

None

Substances subject to the Rotterdam Convention:

None

Substances subject to the Stockholm Convention:

None

Healthcare controls

Workers exposed to this chemical agent must not undergo health checks, provided that available risk-assessment data prove that the risks related to the workers' health and safety are modest and that the 98/24/EC directive is respected.

15.2. Chemical safety assessment

A chemical safety assessment has been performed for the following contained substances

TETRACHLOROETHYLENE

METHYL ETHYL KETONE

HYDROCARBONS, C9, AROMATICS

ETHYL ACETATE

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
Carc. 2	Carcinogenicity, 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 Irrit. 2	Eye irritation, category 2
Skin Irrit. 2	Skin irritation, category 2
STOT SE 3	Specific target organ toxicity - single exposure, category 3
Skin Sens. 1	Skin sensitization, category 1
Aquatic Chronic 2	Hazardous to the aquatic environment, chronic toxicity, category 2
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H351	Suspected of causing cancer.
H312	Harmful in contact with skin.
H332	Harmful if inhaled.
H304	May be fatal if swallowed and enters airways.
H373	May cause damage to organs through prolonged or repeated exposure.
H319	Causes serious eye irritation.

H315	Causes skin irritation.
H335	May cause respiratory irritation.
H317	May cause an allergic skin reaction.
H336	May cause drowsiness or dizziness.
H411	Toxic to aquatic life with long lasting effects.
EUH066	Repeated exposure may cause skin dryness or cracking.

Use descriptor system:

ERC	**2**	Formulation into mixture
ERC	**7**	Use of functional fluid at industrial site
ERC	**8a**	Widespread use of non- reactive processing aid (no inclusion into or onto article, indoor)
ERC	**8d**	Widespread use of non- reactive processing aid (no inclusion into or onto article, outdoor)
PC	**1**	Adhesives, sealants
PC	**15**	Non-metal-surface treatment products
PC	**18**	Ink and toners
PC	**23**	Leather treatment products
PC	**24**	Lubricants, greases, release products
PC	**31**	Polishes and wax blends
PC	**34**	Textile dyes, and impregnating products
PC	**4**	Antifreeze and deicing products
PC	**8**	Biocidal products
PC	**9a**	Coatings and paints, thinners, paint removers
PC	**9b**	Fillers, putties, plasters, modelling clay
PC	**9c**	Finger paints
PROC	**1**	Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions.
PROC	**10**	Roller application or brushing
PROC	**11**	Non industrial spraying
PROC	**13**	Treatment of articles by dipping and pouring
PROC	**14**	Tabletting, compression, extrusion, pelletisation, granulation
PROC	**15**	Use as laboratory reagent
PROC	**19**	Manual activities involving hand contact
PROC	**2**	Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions
PROC	**3**	Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition
PROC	**4**	Chemical production where opportunity for exposure arises
PROC	**5**	Mixing or blending in batch processes
PROC	**8a**	Transfer of substance or mixture (charging and discharging) at non- dedicated facilities
PROC	**8b**	Transfer of substance or mixture (charging and discharging) at dedicated facilities
PROC	**9**	Transfer of substance or mixture into small containers (dedicated filling line, including weighing)

LEGEND:
- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- CAS NUMBER: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE NUMBER: Identifier in ESIS (European archive of existing substances)
- CLP: EC Regulation 1272/2008
- DNEL: Derived No Effect Level
- EmS: Emergency Schedule
- GHS: Globally Harmonized System of classification and labeling of chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulation
- IC50: Immobilization Concentration 50%
- IMDG: International Maritime Code for dangerous goods
- IMO: International Maritime Organization
- INDEX NUMBER: Identifier in Annex VI of CLP
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level

- PBT: Persistent bioaccumulative and toxic as REACH Regulation
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PNEC: Predicted no effect concentration
- REACH: EC Regulation 1907/2006
- RID: Regulation concerning the international transport of dangerous goods by train
- TLV: Threshold Limit Value
- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TWA STEL: Short-term exposure limit
- TWA: Time-weighted average exposure limit
- VOC: Volatile organic Compounds
- vPvB: Very Persistent and very Bioaccumulative as for REACH Regulation
- WGK: Water hazard classes (German).

GENERAL BIBLIOGRAPHY

1. Regulation (EC) 1907/2006 (REACH) of the European Parliament
2. Regulation (EC) 1272/2008 (CLP) of the European Parliament
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5. Regulation (EU) 286/2011 (II Atp. CLP) of the European Parliament
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17. Regulation (EU) 2019/1148
18. Regulation (EU) 2020/217 (XIV Atp. CLP)
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- Patty - Industrial Hygiene and Toxicology
- N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition
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Istituto Superiore di Sanità (ISS) – Archivio Preparati Pericolosi
Codice azienda: IT00465900728
Ragione sociale: Ilpa Adesivi Srl
Nome prodotto ISS: M8101
Codice prodotto ISS: M8101

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.

Training for workers:
Worker training should include content, updates and duration depending on the risk profiles assigned to the business sectors they belong

Changes to previous review:
The following sections were modified:
01 / 03 / 08 / 09 / 10 / 11 / 12 / 14 / 15 / 16.