

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

Product name
UFI :

**DILUENTE: PLA 34,
K314-D03G-P003-F32C**

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

Intended use **Pad printing thinner.**

1.3. Details of the supplier of the safety data sheet

Name
Full address
District and Country

**COMEC ITALIA SRL
Piazzale del lavoro 149
21044 Cavarina (VA)
ITALIA**

Tel. +39 0331 219516

Fax +39 0331 216161

e-mail address of the competent person

responsible for the Safety Data Sheet
Supplier:

**info@comec-italia.it
Edgardo Baggini**

1.4. Emergency telephone number

For urgent inquiries refer to

**Centro Antiveleni di Milano 02 66101029
(Niguarda Ca Granda - Milano)
Centro Antiveleni di Pavia 0382 24444
(Fondazione Maugeri - Pavia)
Centro Antiveleni di Bergamo 800 883300
(Papa Giovanni XXIII - Bergamo)
Centro Antiveleni di Verona 800 011858
(AOUI - Verona)
Centro Antiveleni di Firenze 055 7947819
(Careggi - Firenze)
Centro Antiveleni di Roma 06 3054343
(Agostino Gemelli - Roma)
Centro Antiveleni di Roma 06 49978000
(Umberto I - Roma)
Centro Antiveleni di Roma 06 68593726
(Ospedale pediatrico Bambino Gesù - Roma)
Centro Antiveleni di Napoli 081 5453333
(Antonio Cardarelli - Napoli)
Centro Antiveleni di Foggia 800 183459
(Azienda ospedaliera universitaria - Foggia)**

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 3

H226

Flammable liquid and vapour.

Specific target organ toxicity - single exposure, category 3

H336

May cause drowsiness or dizziness.

2.2. Label elements

Hazard labelling pursuant to EC Regulation 1272/2008 (CLP) and subsequent amendments and supplements.

Hazard pictograms:



Signal words:

Warning

Hazard statements:

H226

Flammable liquid and vapour.

H336

May cause drowsiness or dizziness.

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.

P280

Wear protective gloves/ protective clothing / eye protection / face protection.

P370+P378

In case of fire: use chemical powder, CO2 or dry send to extinguish.

P261

Avoid breathing dust, gas or vapours.

P312

Call a POISON CENTRE or a doctor if you feel unwell.

P403+P233

Store in a well-ventilated place. Keep container tightly closed.

Contains:

2-METHOXY-1-METHYLETHYL ACETATE

2-ETHOXY-1-METHYLETHYL ACETATE

N-BUTYL ACETATE

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

3.1. Substances

Information not relevant

3.2. Mixtures

Contains:

Identification	x = Conc. %	Classification (EC) 1272/2008 (CLP)
2-ETHOXY-1-METHYLETHYL ACETATE		
INDEX 603-177-00-8	$32,5 \leq x < 35$	Flam. Liq. 3 H226, STOT SE 3 H336
EC 259-370-9		
CAS 54839-24-6		
REACH Reg. 01-2119475116-39xxxx		
2-METHOXY-1-METHYLETHYL ACETATE		
INDEX 607-195-00-7	$30 \leq x < 32,5$	Flam. Liq. 3 H226, STOT SE 3 H336
EC 203-603-9		
CAS 108-65-6		
REACH Reg. 01-2119475791-29-xxxx		
BUTYLGLYCOL ACETATE		
INDEX 607-038-00-2	$19,5 \leq x < 21$	Acute Tox. 4 H302, Acute Tox. 4 H312, Acute Tox. 4 H332
EC 203-933-3		ATE Oral: 500 mg/kg, ATE Dermal: 1100 mg/kg, ATE Inhalation vapours: 11 mg/l
CAS 112-07-2		
REACH Reg. 01-2119475112-47xxxx		
N-BUTYL ACETATE		
INDEX 607-025-00-1	$13,5 \leq x < 15$	Flam. Liq. 3 H226, STOT SE 3 H336, EUH066
EC 204-658-1		
CAS 123-86-4		
REACH Reg. 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

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,

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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

Call a POISON CENTRE or a doctor if you feel unwell.

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.

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.

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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. Do not eat, drink or smoke during use. Remove any contaminated clothes and personal protective equipment before entering places in which people eat. Avoid leakage of the product into the environment.

7.2. Conditions for safe storage, including any incompatibilities

Store only in the original container. 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.

2-METHOXY-1-METHYLETHYL ACETATE
Store in an inert atmosphere, sheletered from moisture because it hydrolises easily.

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 FranceDécret n° 2021-1849 du 28

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<div>ITA Italia décembre 2021</div> <div>NLD Nederland Decreto Legislativo 9 Aprile 2008, n.81</div> <div>PRT Portugal Arbeidsomstandighedenregeling. Lijst van wettelijke grenswaarden op grond van de artikelen 4.3, eerste lid, en 4.16, eerste lid, van het Arbeidsomstandighedenbesluit</div> <div>POL Polska Decreto-Lei n.º 1/2021 de 6 de janeiro, valores-limite de exposição profissional indicativos para os agentes químicos. Decreto-Lei n.º 35/2020 de 13 de julho, proteção dos trabalhadores contra os riscos ligados à exposição durante o trabalho a agentes cancerígenos ou mutagénicos</div> <div>ROU România Rozporządzenie ministra rozwoju, pracy i technologii z dnia 18 lutego 2021 r. Zmieniające rozporządzenie w sprawie najwyższych dopuszczalnych stężeń i natężeń czynników szkodliwych dla zdrowia w środowisku pracy</div> <div>SWE Sverige Hotărârea nr. 53/2021 pentru modificarea hotărârii guvernului nr. 1.218/2006, precum și pentru modificarea și completarea hotărârii guvernului nr. 1.093/2006</div> <div>TUR Türkiye Hygieniska gränsvärden, Arbetsmiljöverkets föreskrifter och allmänna råd om hygieniska gränsvärden (AFS 2018:1)</div> <div>GBR United Kingdom Kimyasal Maddelerle Çalışmalarda Sağlık ve Güvenlik Önlemleri Hakkında Yönetmelik 12.08.2013 / 28733; 20.10.2023 / 32345.</div> <div>EU OEL EU EH40/2005 Workplace exposure limits (Fourth Edition 2020)</div> <div> TLV-ACGIH Directive (EU) 2022/431; Directive (EU) 2019/1831; Directive (EU) 2019/130; Directive (EU) 2019/983; Directive (EU) 2017/2398; Directive (EU) 2017/164; Directive 2009/161/EU; Directive 2006/15/EC; Directive 2004/37/EC; Directive 2000/39/EC; Directive 98/24/EC; Directive 91/322/EEC.</div> <div> </div>							

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VLEP	FRA	275	50	550	100	SKIN		
VLEP	ITA	275	50	550	100	SKIN		
TGG	NLD	550						
VLE	PRT	275	50	550	100	SKIN		
NDS/NDSch	POL	260		520		SKIN		
TLV	ROU	275	50	550	100	SKIN		
NGV/KGV	SWE	275	50	550	100	SKIN		
ESD	TUR	275	50	550	100	SKIN		
WEL	GBR	274	50	548	100	SKIN		
OEL	EU	275	50	550	100	SKIN		
Predicted no-effect concentration - PNEC								
Normal value in fresh water				0,635	mg/l			
Normal value in marine water				0,0635	mg/l			
Normal value for fresh water sediment				3,29	mg/kg			
Normal value for marine water sediment				0,329	mg/l			
Normal value for water, intermittent release				6,35	mg/l			
Normal value of STP microorganisms				100	mg/l			
Normal value for the terrestrial compartment				0,29	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
Oral			VND	1,67 mg/kg				
Inhalation			33 mg/m3	33 mg/m3	550 mg/m3		VND	275 mg/m3
Skin			VND	54,8 mg/kg			VND	153,5 mg/kg
BUTYLGLYCOL ACETATE								
Threshold Limit Value								
Type	Country	TWA/8h		STEL/15min		Remarks / Observations		
		mg/m3	ppm	mg/m3	ppm			
TLV	BGR	133	20	333	50	SKIN		
TLV	CZE	130	19,5	300	45	SKIN		
AGW	DEU	65	10	130	20	SKIN 11		
MAK	DEU	66	10	132	20	SKIN Hinweis		
TLV	DNK	134	20	333	50	SKIN E		
VLA	ESP	133	20	333	50	SKIN		
VLEP	FRA	66,5	10	333	50			
VLEP	ITA	133	20	333	50	SKIN		
TGG	NLD	135		333		SKIN		
VLE	PRT	133	20	333	50	SKIN		
NDS/NDSch	POL	100		300		SKIN		
TLV	ROU	133	20	333	50	SKIN		
NGV/KGV	SWE	70	10	333	50	SKIN		
ESD	TUR	133	20	333	50	SKIN		
WEL	GBR	133	20	332	50	SKIN		

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OEL	EU	133	20	333	50	SKIN			
TLV-ACGIH		131	20						
Predicted no-effect concentration - PNEC									
Normal value in fresh water				0,304	mg/l				
Normal value in marine water				0,03	mg/l				
Normal value for fresh water sediment				2,03	mg/l				
Normal value for marine water sediment				0,203	mg/l				
Normal value for water, intermittent release				0,56	mg/l				
Normal value of STP microorganisms				90	mg/l				
Normal value for the food chain (secondary poisoning)				60	mg/kg				
Normal value for the terrestrial compartment				0,415	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	36 mg/kg/d	VND	4,3 mg/kg/d					
Inhalation	200 mg/m3	499 mg/m3	VND	80 mg/m3	333 mg/m3	773 mg/m3	VND	133 mg/m3	
Skin		72 mg/kg bw/d	VND	102 mg/kg/d	102 mg/kg/d	27 mg/kg/d	VND	169 mg/kg/d	
N-BUTYL ACETATE									
Threshold Limit Value									
Type	Country	TWA/8h	STEL/15min		Remarks / Observations				
		mg/m3	ppm	mg/m3	ppm				
TLV	BGR	710		950					
TLV	CZE	241		723					
AGW	DEU	300	62	600	124				
MAK	DEU	480	100	960	200				
TLV	DNK	241	50	723	150	E			
VLA	ESP	241	50	723	150				
VLEP	FRA	241	50	723	150				
VLEP	ITA	241	50	723	150				
TGG	NLD	150							
VLE	PRT	241	50	723	150				
NDS/NDSch	POL	240		720					
TLV	ROU	241	50	723	150				
NGV/KGV	SWE	241	50	723 (C)	150 (C)				
ESD	TUR	241	50	723	150				
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				0,01	mg/l				
Normal value for fresh water sediment				0,98	mg/kg				

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Normal value for marine water sediment	0,09	mg/kg						
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	0,09	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	859,7 mg/m3	895,7 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 ; 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

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

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

EYE PROTECTION

Wear 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 A filter whose class (1, 2 or 3) must be chosen according to the limit of use concentration. (see standard EN 14387).

If the substance considered is odourless or its olfactory threshold is higher than the corresponding TLV-TWA and in the case of an emergency, wear open-circuit compressed air breathing apparatus (in compliance with standard EN 137) or external air-intake breathing apparatus (in compliance with standard EN 138). For a correct choice of respiratory protection device, see standard EN 529.

ENVIRONMENTAL EXPOSURE CONTROLS

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

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Properties	Value	Information
Appearance	liquid	
Colour	colourless	
Odour	typical of solvent	
Melting point / freezing point	not available	
Initial boiling point	> 125 °C	
Flammability	not available	
Lower explosive limit	not available	
Upper explosive limit	not available	
Flash point	$23 \leq T \leq 60$ °C	
Auto-ignition temperature	not available	
Decomposition temperature	not available	
pH	not available	
Kinematic viscosity	not available	
Solubility	partially soluble in water	
Partition coefficient: n-octanol/water	not available	
Vapour pressure	3,13 mmHg	
Density and/or relative density	0,94	
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

Information not available

SECTION 10. Stability and reactivity

10.1. Reactivity

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

2-METHOXY-1-METHYLETHYL ACETATE

Stable in normal conditions of use and storage.

With the air it may slowly develop peroxides that explode with an increase in temperature.

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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.

2-METHOXY-1-METHYLETHYL ACETATE

May react violently with: oxidising substances,strong acids,alkaline metals.

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.

N-BUTYL ACETATE

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

10.5. Incompatible materials

2-METHOXY-1-METHYLETHYL ACETATE

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

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.

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

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<p><u>Metabolism, toxicokinetics, mechanism of action and other information</u></p>									
<p>2-METHOXY-1-METHYLETHYL ACETATE The main route of entry is the skin, whereas the respiratory route is less important due to the low vapour pressure of the product.</p>									
<p><u>Information on likely routes of exposure</u></p>									
<p>2-METHOXY-1-METHYLETHYL ACETATE WORKERS: inhalation; contact with the skin.</p>									
<p>N-BUTYL ACETATE WORKERS: inhalation; contact with the skin.</p>									
<p><u>Delayed and immediate effects as well as chronic effects from short and long-term exposure</u></p>									
<p>2-METHOXY-1-METHYLETHYL ACETATE 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 (INCR, 2010).</p>									
<p>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.</p>									
<p><u>Interactive effects</u></p>									
<p>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).</p>									
<p><u>ACUTE TOXICITY</u></p> <table> <tr> <td>ATE (Inhalation - vapours) of the mixture:</td><td>> 20 mg/l</td></tr> <tr> <td>ATE (Oral) of the mixture:</td><td>>2000 mg/kg</td></tr> <tr> <td>ATE (Dermal) of the mixture:</td><td>>2000 mg/kg</td></tr> </table>		ATE (Inhalation - vapours) of the mixture:	> 20 mg/l	ATE (Oral) of the mixture:	>2000 mg/kg	ATE (Dermal) of the mixture:	>2000 mg/kg		
ATE (Inhalation - vapours) of the mixture:	> 20 mg/l								
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ATE (Dermal) of the mixture:	>2000 mg/kg								
<p>2-ETHOXY-1-METHYLETHYL ACETATE</p> <table> <tr> <td>LD50 (Dermal):</td><td>13,42 ml/Kg Coniglio / Rabbit</td></tr> <tr> <td>LD50 (Oral):</td><td>> 5000 mg/kg Ratto / Rat</td></tr> <tr> <td>LC50 (Inhalation vapours):</td><td>6,99 mg/l/4h Rat</td></tr> </table>		LD50 (Dermal):	13,42 ml/Kg Coniglio / Rabbit	LD50 (Oral):	> 5000 mg/kg Ratto / Rat	LC50 (Inhalation vapours):	6,99 mg/l/4h Rat		
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<p>2-METHOXY-1-METHYLETHYL ACETATE</p> <table> <tr> <td>LD50 (Dermal):</td><td>> 5000 mg/kg Coniglio / Rabbit</td></tr> <tr> <td>LD50 (Oral):</td><td>8500 mg/kg Ratto / Rat</td></tr> <tr> <td>LC50 (Inhalation vapours):</td><td>4345 ppm/6h Ratto / Rat</td></tr> </table>		LD50 (Dermal):	> 5000 mg/kg Coniglio / Rabbit	LD50 (Oral):	8500 mg/kg Ratto / Rat	LC50 (Inhalation vapours):	4345 ppm/6h Ratto / Rat		
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<p>BUTYLGLYCOL ACETATE</p> <table> <tr> <td>ATE (Dermal):</td><td>1100 mg/kg estimate from table 3.1.2 of Annex I of the CLP (figure used for calculation of the acute toxicity estimate of the mixture)</td></tr> <tr> <td>ATE (Oral):</td><td>500 mg/kg estimate from table 3.1.2 of Annex I of the CLP (figure used for calculation of the acute toxicity estimate of the mixture)</td></tr> <tr> <td>LC50 (Inhalation vapours):</td><td>> 2,66 mg/l/4h Rat</td></tr> <tr> <td>ATE (Inhalation vapours):</td><td>11 mg/l estimate from table 3.1.2 of Annex I of the CLP (figure used for calculation of the acute toxicity estimate of the mixture)</td></tr> </table>		ATE (Dermal):	1100 mg/kg estimate from table 3.1.2 of Annex I of the CLP (figure used for calculation of the acute toxicity estimate of the mixture)	ATE (Oral):	500 mg/kg estimate from table 3.1.2 of Annex I of the CLP (figure used for calculation of the acute toxicity estimate of the mixture)	LC50 (Inhalation vapours):	> 2,66 mg/l/4h Rat	ATE (Inhalation vapours):	11 mg/l estimate from table 3.1.2 of Annex I of the CLP (figure used for calculation of the acute toxicity estimate of the mixture)
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LC50 (Inhalation vapours):	> 2,66 mg/l/4h Rat								
ATE (Inhalation vapours):	11 mg/l estimate from table 3.1.2 of Annex I of the CLP (figure used for calculation of the acute toxicity estimate of the mixture)								

N-BUTYL ACETATE

LD50 (Dermal):	> 14000 mg/kg Rabbit
LD50 (Oral):	> 10000 mg/kg Rat
LC50 (Inhalation vapours):	> 21 mg/l/4h Rat

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

Does not meet the classification criteria for this hazard class

GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

CARCINOGENICITY

Does not meet the classification criteria for this hazard class

REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class

STOT - SINGLE EXPOSURE

May cause drowsiness or dizziness

STOT - REPEATED EXPOSURE

Does not meet the classification criteria for this hazard class

ASPIRATION HAZARD

Does not meet the classification criteria for this hazard class

11.2. Information on other hazards

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

SECTION 12. Ecological information

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

12.1. Toxicity

2-METHOXY-1-METHYLETHYL ACETATE

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<p>LC50 - for Fish 134 mg/l/96h Pesce, Oncorhynchus mykiss OECD 203</p> <p>EC50 - for Crustacea > 500 mg/l/48h Daphnia magna</p> <p>EC50 - for Algae / Aquatic Plants > 1000 mg/l/72h Selenastrum capricornutum OECD 201</p> <p>Chronic NOEC for Fish 47,5 mg/l Oryzias latipes 14 gg OECD 204</p> <p>Chronic NOEC for Crustacea 100 mg/l Daphnia magna 21 gg OECD 202</p>		
2-ETHOXY-1-METHYLETHYL ACETATE		
<p>LC50 - for Fish 140 mg/l/48h Oncorhynchus mykiss (test 48h)</p> <p>EC50 - for Crustacea 110 mg/l/48h Daphnia magna</p> <p>EC50 - for Algae / Aquatic Plants > 100 mg/l/72h Scenedesmus subspicatus</p>		
N-BUTYL ACETATE		
<p>LC50 - for Fish 18 mg/l/96h Pimephales promelas</p> <p>EC50 - for Crustacea 44 mg/l/48h Daphnia Magna</p> <p>EC10 for Algae / Aquatic Plants 674,7 mg/l/72h Desmodesmus subspicatus</p> <p>Chronic NOEC for Crustacea 23 mg/l 21d/ Daphnia magna</p>		
BUTYLGLYCOL ACETATE		
<p>LC50 - for Fish > 20 mg/l/96h Fish 20-40 mg/kg (48h)</p> <p>EC50 - for Crustacea 145 mg/l/24h Daphnia Magna (24h)</p> <p>EC50 - for Algae / Aquatic Plants 1570 mg/l/72h Scenedesmus subspicatus</p>		
12.2. Persistence and degradability		
2-METHOXY-1-METHYLETHYL ACETATE		
<p>Solubility in water > 10000 mg/l</p> <p>Rapidly degradable</p> <p>OECD GI 301F 83% 10 d</p>		
2-ETHOXY-1-METHYLETHYL ACETATE		
<p>Solubility in water > 10000 mg/l</p> <p>Rapidly degradable</p> <p>Activated sludge - 89%/15 d - 100%/28 d</p>		
N-BUTYL ACETATE		
<p>Solubility in water 5,3 mg/l</p> <p>Rapidly degradable</p>		
BUTYLGLYCOL ACETATE		
<p>Solubility in water 15000 mg/l</p> <p>Rapidly degradable</p>		
12.3. Bioaccumulative potential		
2-METHOXY-1-METHYLETHYL ACETATE		
<p>Partition coefficient: n-octanol/water 1,2</p> <p>BCF 100</p>		
2-ETHOXY-1-METHYLETHYL ACETATE		
<p>Partition coefficient: n-octanol/water 0,76</p> <p>BCF 3,162</p>		

N-BUTYL ACETATE
Partition coefficient: n-octanol/water 2,3
BCF 15,3

BUTYLGLYCOL ACETATE
Partition coefficient: n-octanol/water 1,51

12.4. Mobility in soil

2-METHOXY-1-METHYLETHYL ACETATE
Partition coefficient: soil/water 1,7

2-ETHOXY-1-METHYLETHYL ACETATE
Partition coefficient: soil/water 1

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 \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 1993

14.2. UN proper shipping name

ADR / RID: FLAMMABLE LIQUID, N.O.S. (2-ETHOXY-1-METHYLETHYL ACETATE; 2-METHOXY-1-METHYLETHYL ACETATE)
IMDG: FLAMMABLE LIQUID, N.O.S. (2-ETHOXY-1-METHYLETHYL ACETATE; 2-METHOXY-1-METHYLETHYL ACETATE)
IATA: FLAMMABLE LIQUID, N.O.S. (2-ETHOXY-1-METHYLETHYL ACETATE; 2-METHOXY-1-METHYLETHYL ACETATE)

14.3. Transport hazard class(es)

ADR / RID: Class: 3 Label: 3
IMDG: Class: 3 Label: 3
IATA: Class: 3 Label: 3



14.4. Packing group

ADR / RID, IMDG, IATA: III

14.5. Environmental hazards

ADR / RID: NO
IMDG: not marine pollutant
IATA: NO

14.6. Special precautions for user

ADR / RID:	HIN - Kemler: 30	Limited Quantities: 5 It	Tunnel restriction code: (D/E)
	Special provision: 274, 601		
IMDG:	EMS: F-E, <u>S-E</u>	Limited Quantities: 5 It	
IATA:	Cargo:	Maximum quantity: 220 L	Packaging instructions: 366
	Passengers:	Maximum quantity: 60 L	Packaging instructions: 355
	Special provision:	A3	

14.7. Maritime transport in bulk according to IMO instruments

Information not relevant

SECTION 15. Regulatory information

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

Seveso Category - Directive 2012/18/EU: P5c

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

Product
Point 3 - 40

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

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. 3	Flammable liquid, category 3
Acute Tox. 4	Acute toxicity, category 4
STOT SE 3	Specific target organ toxicity - single exposure, category 3
H226	Flammable liquid and vapour.

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<div> <div>H302</div> <div>Harmful if swallowed.</div> </div> <div> <div>H312</div> <div>Harmful in contact with skin.</div> </div> <div> <div>H332</div> <div>Harmful if inhaled.</div> </div> <div> <div>H336</div> <div>May cause drowsiness or dizziness.</div> </div> <div> <div>EUH066</div> <div>Repeated exposure may cause skin dryness or cracking.</div> </div>		
<p>LEGEND:</p> <ul style="list-style-type: none"> - 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 - 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). <p>GENERAL BIBLIOGRAPHY</p> <ol style="list-style-type: none"> 1. Regulation (EC) 1907/2006 (REACH) of the European Parliament 2. Regulation (EC) 1272/2008 (CLP) of the European Parliament 3. Regulation (EU) 2020/878 (II Annex of REACH Regulation) 4. Regulation (EC) 790/2009 (I Atp. CLP) of the European Parliament 5. Regulation (EU) 286/2011 (II Atp. CLP) of the European Parliament 6. Regulation (EU) 618/2012 (III Atp. CLP) of the European Parliament 7. Regulation (EU) 487/2013 (IV Atp. CLP) of the European Parliament 8. Regulation (EU) 944/2013 (V Atp. CLP) of the European Parliament 9. Regulation (EU) 605/2014 (VI Atp. CLP) of the European Parliament 10. Regulation (EU) 2015/1221 (VII Atp. CLP) of the European Parliament 11. Regulation (EU) 2016/918 (VIII Atp. CLP) of the European Parliament 12. Regulation (EU) 2016/1179 (IX Atp. CLP) 13. Regulation (EU) 2017/776 (X Atp. CLP) 14. Regulation (EU) 2018/669 (XI Atp. CLP) 15. Regulation (EU) 2019/521 (XII Atp. CLP) 16. Delegated Regulation (UE) 2018/1480 (XIII Atp. CLP) 17. Regulation (EU) 2019/1148 18. Delegated Regulation (UE) 2020/217 (XIV Atp. CLP) 19. Delegated Regulation (UE) 2020/1182 (XV Atp. CLP) 20. Delegated Regulation (UE) 2021/643 (XVI Atp. CLP) 21. Delegated Regulation (UE) 2021/849 (XVII Atp. CLP) 		

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- 22. Delegated Regulation (UE) 2022/692 (XVIII Atp. CLP)
- 23. Delegated Regulation (UE) 2023/707
- 24. Delegated Regulation (UE) 2023/1434 (XIX Atp. CLP)
- 25. Delegated Regulation (UE) 2023/1435 (XX Atp. CLP)
- 26. Delegated Regulation (UE) 2024/197 (XXI Atp. CLP)
- The Merck Index. - 10th Edition
- Handling Chemical Safety
- INRS - Fiche Toxicologique (toxicological sheet)
- Patty - Industrial Hygiene and Toxicology
- N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition
- IFA GESTIS website
- ECHA website
- Database of SDS models for chemicals - Ministry of Health and ISS (Istituto Superiore di Sanità) - Italy

Note for users:
The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product.
This document must not be regarded as a guarantee on any specific product property.
The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.
Provide appointed staff with adequate training on how to use chemical products.
CALCULATION METHODS FOR CLASSIFICATION
Chemical and physical hazards: Product classification derives from criteria established by the CLP Regulation, Annex I, Part 2. The data for evaluation of chemical-physical properties are reported in section 9.
Health hazards: Product classification is based on calculation methods as per Annex I of CLP, Part 3, unless determined otherwise in Section 11.
Environmental hazards: Product classification is based on calculation methods as per Annex I of CLP, Part 4, unless determined otherwise in Section 12.

For information on any exposure scenarios of the substances present in the mixture, contact Sericom Italia srl.