Safety Data Sheet

According to Canadian HPR - WHMIS 2015

1. Identification

1.1. Product identifier

Code: **5823VR01-02-E**
Product name: **URACRIL - FONDO ACRILICO RAPIDO ACRYLIC PRIMER FAST DRYING BIANCO/WHITE**

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

Intended use: **Acrylic 2K primer for exterior**

Identified Uses	Industrial	Professional	Consumer
Painting of iron, machine tools, small parts, etc ..	✓	-	-

1.3. Details of the supplier of the safety data sheet

Name: **ALCEA S.p.A.**
Full address: **Via Piemonte 18**
District and Country: **20030 Senago (MI)**
Italy
Tel. +39.02-99014-1 (centralino)
Fax +39.02-99014-300

e-mail address of the competent person responsible for the Safety Data Sheet: **Ufficio Tecnico (msds@alcea.com)**

Supplier: **Ufficio Tecnico (msds@alcea.com)**

1.4. Emergency telephone number

For urgent inquiries refer to: **ALCEA Technical Office Tel. + 39.02-99014-220 / 221 (Monday to Friday 8.00-12.00 / 13.00-17.00)**

CENTRI ANTIVELENI (CAV)
- Osp. Niguarda Ca' Granda
Piazza Ospedale Maggiore, 3 - 20162 - Milano - Tel: 02-66101029

2. Hazards identification

2.1. Classification of the substance or mixture

The product is classified as hazardous pursuant to the provisions set forth in Canada's Hazardous Products Regulations (HPR) (WHMIS 2015). The product thus requires a safety datasheet.
Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet.

Classification and Hazard Statement

Flammable liquid, category 2	Highly flammable liquid and vapour.
Carcinogenicity, category 1A	May cause cancer.
Specific target organ toxicity - repeated exposure, category 2	May cause damage to organs through prolonged or repeated exposure.
Specific target organ toxicity - single exposure, category 3	May cause drowsiness or dizziness.

Hazard pictograms:

Signal words: Danger

Hazard statements:
H225 Highly flammable liquid and vapour.

2. Hazards identification ... / >>

H350	May cause cancer.
H373	May cause damage to organs through prolonged or repeated exposure.
H336	May cause drowsiness or dizziness.

Precautionary statements:
Prevention:

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P260	Do not breathe dust / vapors / aerosols.
P202	Do not handle until all safety precautions have been read and understood.
P242	Use non-sparking tools.
P201	Obtain special instructions before use.
P280	Wear protective gloves/ protective clothing / eye protection / face protection.
P271	Use only outdoors or in a well-ventilated area.
P240	Ground and bond container and receiving equipment.
P243	Take action to prevent static discharges.
P241	Use explosion-proof [electrical / ventilating / lighting / . . .] equipment.

Response:

P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
P312	Call a POISON CENTRE / doctor / . . . if you feel unwell.
P304+P340	IF INHALED: remove person to fresh air and keep comfortable for breathing.
P370+P378	In case of fire: use foam, powder or CO2 to extinguish, "do not use water".

Storage:

P403+P235	Store in a well-ventilated place. Keep cool.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.

Disposal:

P501	Dispose of the product / container in an ecological platform.

2.2. Other hazards

Additional hazards
Repeated exposure may cause skin dryness or cracking.
Contains:
DIBUTYLTIN DILAURATE
Phthalic anhydride with not more than 0,05% of maleic anhydride
May produce an allergic reaction.

3. Composition/information on ingredients

3.2. Mixtures

Contains:

Identification	x = Conc. % (w/w)	Classification:
N-butyl acetate		
N-BUTYL ACETATE		
CAS 123-86-4	15 ≤ x < 16	**Flammable liquid, category 3 H226, Specific target organ toxicity - single exposure, category 3 H336**
REACH Reg. 01-2119485493-29-XXXX		
TITANIUM DIOXIDE		
CAS 13463-67-7	7.5 ≤ x < 8.5	**Carcinogenicity, category 2 H351**
REACH Reg. 01-2119489379-17-XXXX		
XYLENE (MIXTURE OF ISOMERS)		
CAS 1330-20-7	4.5 ≤ x < 5	**Flammable liquid, category 3 H226, Acute toxicity, category 4 H312, Acute toxicity, category 4 H332, Aspiration hazard, category 1 H304, Specific target organ toxicity - repeated exposure, category 2 H373, Eye irritation, category 2 H319, Skin irritation, category 2 H315, Specific target organ toxicity - single exposure, category 3 H335, Hazardous to the aquatic environment, chronic toxicity, category 3 H412**
REACH Reg. 01-2119488216-32-XXXX		
ISOBUTYL METHYL KETONE		
4-METHYLPENTAN-2-ONE		
CAS 108-10-1	4.5 ≤ x < 5	**Flammable liquid, category 2 H225, Acute toxicity, category 4 H332, Eye irritation, category 2 H319, Specific target organ toxicity - single exposure, category 3 H335**
REACH Reg. 01-2119473980-30-XXXX		
1-Methoxy-2-propyl acetate		

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

1-METHOXY-2-PROPYL ACETATE
PMA
PROPYLENMETHYLGLYCOL ACETATE
METHOXY PROPYL ACETATE
CAS *108-65-6* 4 ≤ x < 4.5 **Flammable liquid, category 3 H226, Specific target organ toxicity - single exposure, category 3 H336**
REACH Reg. *01-2119475791-29-XXXX*

Isobutyl acetate
ISOBUTYL ACETATE
CAS *110-19-0* 3 ≤ x < 3.5 **Flammable liquid, category 2 H225**
REACH Reg. *01-2119488971-22-XXXX*

NITROCELLULOSE
CAS *9004-70-0* 1.5 ≤ x < 2 **Flammable solid, category 1 H228**

BUTYLGLYCOL ACETATE
2-BUTOXYETHYLACETATE
ETHYLENGLYCOLMONOBUTYL ETHER ACETATE
CAS *112-07-2* 1 ≤ x < 1.5 **Flammable liquid, category 4 H227, Acute toxicity, category 4 H312, Acute toxicity, category 4 H332**
REACH Reg. *01-2119475112-47-XXXX*

ETHYLBENZENE
CAS *100-41-4* 0.4 ≤ x < 0.7 **Flammable liquid, category 2 H225, Carcinogenicity, category 2 H351, Acute toxicity, category 4 H332, Aspiration hazard, category 1 H304, Specific target organ toxicity - repeated exposure, category 2 H373**
REACH Reg. *01-2119489370-35-XXXX*

ETHYL ACETATE
ETHYL ACETATE
CAS *141-78-6* 0.4 ≤ x < 0.7 **Flammable liquid, category 2 H225, Eye irritation, category 2 H319, Specific target organ toxicity - single exposure, category 3 H336**
REACH Reg. *01-2119475103-46-XXXX*

ETHANOL
ETHYL ALCOHOL
CAS *64-17-5* 0.1 ≤ x < 0.4 **Flammable liquid, category 2 H225, Carcinogenicity, category 1A H350**
REACH Reg. *01-2119457610-43-XXXX*

METHYL ETHYL KETONE
2-BUTANONE
MEK
BUTANONE
CAS *78-93-3* 0 ≤ x < 0.05 **Flammable liquid, category 2 H225, Eye irritation, category 2 H319, Specific target organ toxicity - single exposure, category 3 H336**
REACH Reg. *01-2119457290-43-XXXX*

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

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

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 30-60 minutes, opening the eyelids fully. Get medical advice/attention.
SKIN: Remove contaminated clothing. Rinse skin with a shower immediately. Get medical advice/attention.
INGESTION: Have the subject drink as much water as possible. Get medical advice/attention. Do not induce vomiting unless explicitly authorised by a doctor.
INHALATION: Get medical advice/attention immediately. Remove victim to fresh air, away from the accident scene. If the subject stops breathing, administer artificial respiration. Take suitable precautions for rescue workers.

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

5. Fire-fighting 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

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF 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. 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).

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.

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.

7. Handling and storage

7.1. Precautions for safe handling

Keep away from heat, sparks and naked flames; do not smoke or use matches or lighters. Without adequate ventilation, vapours may accumulate at ground level and, if ignited, catch fire even at a distance, with the danger of backfire. Avoid bunching of electrostatic charges. When performing transfer operations involving large containers, connect to an earthing system and wear antistatic footwear. Vigorous stirring and flow through the tubes and equipment may cause the formation and accumulation of electrostatic charges. In order to avoid the risk of fires and explosions, never use compressed air when handling. Open containers with caution as they may be pressurised. Do not eat, drink or smoke during use. Avoid leakage of the product into the environment.

7.2. Conditions for safe storage, including any incompatibilities

Store only in the original container. Store the containers sealed, in a well ventilated place, away from direct sunlight. Store in a cool and well ventilated place, keep far away from sources of heat, naked flames and sparks and other sources of ignition. Keep containers away from any incompatible materials, see section 10 for details.

7.3. Specific end use(s)

Information not available

8. Exposure controls/personal protection

8.1. Control parameters

Regulatory References:

ONT	Ontario	R.R.O 1990, REGULATION 833
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 2021

XYLENE (MIXTURE OF ISOMERS)

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
TLV-ACGIH	-	434	100	651	150	
ONT	CAN		100		150	
OEL	EU	221	50	442	100	SKIN
OSHA	USA	435	100			

2-METHOXY-1-METHYLETHYL ACETATE

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
OEL	EU	275	50	550	100	SKIN
ONT	CAN	270	50			

2-METHYLPROPAN-1-OL

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
TLV-ACGIH	-	152	50			
ONT	CAN	50				
OSHA	USA	300	100			

TOLUENE

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
TLV-ACGIH	-		20			
ONT	CAN		20			
OEL	EU	192	50	384	100	SKIN
OSHA	USA		200		300	

ETHYLBENZENE

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
TLV-ACGIH	-	87	20			
ONT	CAN		20			
OEL	EU	442	100	884	200	SKIN
OSHA	USA	435	100			

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

ETHANOL

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
TLV-ACGIH	-			1884	1000	
ONT	CAN				1000	
OSHA	USA	1900	1000			

2-BUTOXYETHANOL

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
TLV-ACGIH	-	97	20			
ONT	CAN	20				
OEL	EU	98	20	246	50	SKIN
OSHA	USA	240	50			SKIN

2-PROPANOL

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
TLV-ACGIH	-	492	200	983	400	
ONT	CAN	200				
OSHA	USA	980	400			

METHYL ETHYL KETONE

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
TLV-ACGIH	-	590	200	885	300	
ONT	CAN		200		300	
OEL	EU	600	200	900	300	
OSHA	USA	590	200			

ETHYL ACETATE

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
TLV-ACGIH	-	1441	400			
ONT	CAN		400			
OEL	EU	734	200	1468	400	
OSHA	USA	1400	400			

N-BUTYL ACETATE

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
OEL	EU	241	50	723	150	
TLV-ACGIH	-		50		150	
ONT	CAN		150		200	
OSHA	USA	710	150			

ISOBUTYL ACETATE

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
OEL	EU	241	50	723	150	
TLV-ACGIH	-		50		150	
ONT	CAN		150			
OSHA	USA	700	150			

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

BUTYLGLYCOL ACETATE

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
TLV-ACGIH	-	131	20			
OEL	EU	133	20	333	50	SKIN

HYDROCARBONS, C9, AROMATIC

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
TLV-ACGIH	-	100	19			

ISOBUTYL METHYL KETONE

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
TLV-ACGIH	-	82	20	307	75	
OEL	EU	83	20	208	50	
OSHA	USA	410	100			

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

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. Personal protective equipment must comply with current regulations.
HAND PROTECTION
Protect hands with category III work gloves (OSHA 29 CFR 1910.138).
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 I professional long-sleeved overalls and safety footwear. Wash body with soap and water after removing protective clothing.
EYE PROTECTION
Wear airtight protective goggles (OSHA 29 CFR 1910.133, CSA Standard CAN/CSA-Z94.3-92).
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 NIOSH certified filter, whose class must be chosen according to the limit of use concentration (NIOSH 42 CFR 84, OSHA 29 CFR 1910.134, CSA Standard Z94.4-02). 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 or external air-intake breathing apparatus. For a correct choice of respiratory protection device, see standard NIOSH 42 CFR 84, OSHA 29 CFR 1910.134, CSA Standard Z94.4-02.
ENVIRONMENTAL EXPOSURE CONTROLS
The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.

9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Properties		Value			Information
Appearance		liquid			
Colour		white			
Odour		Esters			
Odour threshold		Not available			
pH		Not available			
Melting point / freezing point		Not available			
Initial boiling point		127	°C	(260,6 °F)	
Boiling range		Not available			
Flash point	<	23	°C	(73,4 °F)	
Evaporation rate		Not available			

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

Flammability (solid, gas)	Not available
Lower inflammability limit	Not available
Upper inflammability limit	Not available
Lower explosive limit	1.7 % (V/V)
Upper explosive limit	7.67 % (V/V)
Vapour pressure	Not available
Vapour density	Not available
Relative density	1.376
Solubility	Not Soluble
Partition coefficient: n-octanol/water	Not available
Auto-ignition temperature	370 °C
Decomposition temperature	Not available
Viscosity	>20,5 mm2/sec (40°C)
Explosive properties	Not available
Oxidising properties	Not available

9.2. Other information

Total solids (250°C / 482°F)	63,56 %

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.

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.
ISOBUTYL ACETATE
Decomposes under the effect of heat.Attacks various types of plastic materials.
ISOBUTYL METHYL KETONE
Reacts violently with: light metals.Attacks various types of plastic materials.

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.

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.
2-METHOXY-1-METHYLETHYL ACETATE
May react violently with: oxidising substances,strong acids,alkaline metals.
ETHYLBENZENE
Reacts violently with: strong oxidants.Attacks various types of plastic materials.May form explosive mixtures with: air.
ETHANOL
Risk of explosion on contact with: alkaline metals,alkaline oxides,calcium hypochlorite,sulphur monofluoride,acetic anhydride,acids,concentrated hydrogen peroxide,perchlorates,perchloric acid,perchloronitrile,mercury nitrate,nitric acid,silver,silver nitrate,ammonia,silver oxide,ammonia,strong oxidising agents,nitrogen dioxide.May react dangerously with: bromoacetylene,chlorine acetylene,bromine trifluoride,chromium trioxide,chromyl chloride,fluorine,potassium tert-butoxide,lithium hydride,phosphorus trioxide,black platinum,zirconium (IV) chloride,zirconium (IV) iodide.Forms explosive mixtures with: air.
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.
N-BUTYL ACETATE
Risk of explosion on contact with: strong oxidising agents.May react dangerously with: alkaline hydroxides,potassium tert-butoxide.Forms

10. Stability and reactivity ... / >>

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.
ISOBUTYL METHYL KETONE
May react violently with: oxidising agents.Forms peroxides with: air.Forms explosive mixtures with: hot air.

10.4. Conditions to avoid

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

ETHANOL
Avoid exposure to: sources of heat,naked flames.
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.
ISOBUTYL ACETATE
Avoid exposure to: sources of heat,naked flames.
ISOBUTYL METHYL KETONE
Avoid exposure to: sources of heat.

10.5. Incompatible materials

2-METHOXY-1-METHYLETHYL ACETATE
Incompatible with: oxidising substances,strong acids,alkaline metals.
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.
ISOBUTYL ACETATE
Incompatible with: strong oxidants,nitrates,strong acids,strong bases.
ISOBUTYL METHYL KETONE
Incompatible with: oxidising substances,reducing substances.

10.6. Hazardous decomposition products

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

ETHYLBENZENE
May develop: methane,styrene,hydrogen,ethane.

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

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.

Information on likely routes of exposure

XYLENE (MIXTURE OF ISOMERS)
WORKERS: inhalation; contact with the skin.
POPULATION: ingestion of contaminated food or water; inhalation of ambient air.

2-METHOXY-1-METHYLETHYL ACETATE
WORKERS: inhalation; contact with the skin.

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

11. Toxicological information ... / >>

N-BUTYL ACETATE
WORKERS: inhalation; contact with the skin.

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

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

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).

ETHYLBENZENE
As the counterparts of benzene, may have an acute effect on the central nervous system, with depression, narcosis, often preceded by dizziness and associated with headache (Ispesl). Is irritating for skin, conjunctiva and respiratory tract.

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

XYLENE (MIXTURE OF ISOMERS)

LD50 (Oral):	3523 mg/kg Rat
LD50 (Dermal):	4350 mg/kg Rabbit
LC50 (Inhalation vapours):	26 mg/l/4h Rat

TITANIUM DIOXIDE

LD50 (Oral):	> 10000 mg/kg Rat

2-METHOXY-1-METHYLETHYL ACETATE

LD50 (Oral):	8530 mg/kg Rat
LD50 (Dermal):	> 5000 mg/kg Rat

ETHYLBENZENE

LD50 (Oral):	3500 mg/kg Rat
LD50 (Dermal):	15354 mg/kg Rabbit
LC50 (Inhalation vapours):	17.2 mg/l/4h Rat

ETHANOL

LD50 (Oral):	> 5000 mg/kg Rat
LC50 (Inhalation vapours):	120 mg/l/4h Pimephales promelas

METHYL ETHYL KETONE

LD50 (Oral):	2737 mg/kg Rat
LD50 (Dermal):	6480 mg/kg Rabbit
LC50 (Inhalation vapours):	23.5 mg/l/8h Rat

11. Toxicological information ... / >>

N-BUTYL ACETATE
LD50 (Oral): > 6400 mg/kg Rat
LD50 (Dermal): > 5000 mg/kg Rabbit
LC50 (Inhalation vapours): 21.1 mg/l/4h Rat

CELLULOSE NITRATE
LD50 (Oral): > 5000 mg/kg Rat

ISOBUTYL METHYL KETONE
LD50 (Oral): 2080 mg/kg Rat
LD50 (Dermal): > 16000 mg/kg Rabbit
LC50 (Inhalation vapours): 11 mg/l/4h

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

Contains:
DIBUTYLTIN DILAURATE
Phthalic anhydride with not more than 0,05% of maleic anhydride
May produce an allergic reaction.

GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

CARCINOGENICITY

May cause cancer

Carcinogenicity Assessment:
13463-67-7 TITANIUM DIOXIDE
ACGIH:: A4
IARC:2B
7727-43-7 BARIUM SULFATE
ACGIH:: A4
1330-20-7 XYLENE (MIXTURE OF ISOMERS)
ACGIH:: A4
IARC:3
108-10-1 ISOBUTYL METHYL KETONE
IARC:2B
112-07-2 BUTYLGLYCOL ACETATE
ACGIH:: A3
67-63-0 2-PROPANOL
IARC:3
100-41-4 ETHYLBENZENE
ACGIH:: A3
IARC:2B
111-76-2 2-BUTOXYETHANOL
ACGIH:: A3
IARC:3
64-17-5 ETHANOL
ACGIH:: A3
IARC:1
100-42-5 STYRENE
ACGIH:: A4
IARC:2B
NTP: Reasonably Anticipated
108-88-3 TOLUENE
ACGIH:: A4
IARC:3
25013-15-4

11. Toxicological information ... / >>

Viniltoluene
IARC:3

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".

ETHYLBENZENE
Classified in Group 2B (possible human carcinogen) by the International Agency for Research on Cancer (IARC) - (IARC, 2000).
Classified in Group D (not classifiable as a human carcinogen) by the US Environmental Protection Agency (EPA) - (US EPA file on-line 2014).

REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class

STOT - SINGLE EXPOSURE

May cause drowsiness or dizziness

STOT - REPEATED EXPOSURE

May cause damage to organs

ASPIRATION HAZARD

Does not meet the classification criteria for this hazard class Viscosity: >20,5 mm2/sec (40°C)

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

Information not available

12.2. Persistence and degradability

XYLENE (MIXTURE OF ISOMERS)

Solubility in water 100 - 1000 mg/l
Rapidly degradable

TITANIUM DIOXIDE

Solubility in water < 0.001 mg/l
Degradability: information not available

2-METHOXY-1-METHYLETHYL ACETATE

Solubility in water > 10000 mg/l
Rapidly degradable

ETHYLBENZENE

Solubility in water 1000 - 10000 mg/l
Rapidly degradable

ETHANOL

Solubility in water 1000 - 10000 mg/l
Rapidly degradable

12. Ecological information ... / >>

METHYL ETHYL KETONE

Solubility in water	> 10000 mg/l
Rapidly degradable	

ETHYL ACETATE

Solubility in water	> 10000 mg/l
Rapidly degradable	

N-BUTYL ACETATE

Solubility in water	1000 - 10000 mg/l

ISOBUTYL ACETATE

Solubility in water	1000 - 10000 mg/l
Rapidly degradable	

BUTYLGLYCOL ACETATE
Rapidly degradable

ISOBUTYL METHYL KETONE

Solubility in water	> 10000 mg/l
Rapidly degradable	

12.3. Bioaccumulative potential

XYLENE (MIXTURE OF ISOMERS)

Partition coefficient: n-octanol/water	3.12
BCF	25.9

2-METHOXY-1-METHYLETHYL ACETATE

Partition coefficient: n-octanol/water	1.2

ETHYLBENZENE

Partition coefficient: n-octanol/water	3.6

ETHANOL

Partition coefficient: n-octanol/water	-0.35

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
BCF	15.3

ISOBUTYL ACETATE

Partition coefficient: n-octanol/water	2.3
BCF	15.3

12. Ecological information ... / >>

BUTYLGLYCOL ACETATE

Partition coefficient: n-octanol/water 1.51

ISOBUTYL METHYL KETONE

Partition coefficient: n-octanol/water 1.9

12.4. Mobility in soil

XYLENE (MIXTURE OF ISOMERS)

Partition coefficient: soil/water 2.73

N-BUTYL ACETATE

Partition coefficient: soil/water < 3

ISOBUTYL METHYL KETONE

Partition coefficient: soil/water 2.008

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

13. Disposal considerations

13.1. Waste treatment methods

Reuse, when possible. Neat product residues should be considered special non-hazardous waste.
Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations.
CONTAMINATED PACKAGING
Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

14. Transport information

14.1. UN number

ADR / RID, IMDG, IATA: 1263

14.2. UN proper shipping name

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

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. Transport information ... / >>

14.5. Environmental hazards

ADR / RID: NO
IMDG: NO
IATA: NO

14.6. Special precautions for user

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

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

Information not relevant

15. Regulatory information

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

Substances subject to the Rotterdam Convention:
None

Canadian Regulatory Information

This product has been classified in accordance with the hazard criteria of the Hazardous Products Regulations (HPR).

Safety Data Sheet according to WHMIS 2015.

Inventory Status of the contained substance/s.

All ingredients are listed in DSL.

16. Other information

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

H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H227	Combustible liquid.
H228	Flammable solid.
H350	May cause cancer.
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.
H336	May cause drowsiness or dizziness.
H412	Harmful to aquatic life with long lasting effects.

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)
- CLP: Regulation (EC) 1272/2008
- 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

16. Other information ... / >>

- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PEL: Predicted exposure level
- 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
- WHMIS: Workplace Hazardous Materials Information System.

GENERAL BIBLIOGRAPHY:
- GHS rev. 5
- The Merck Index. 10th Edition
- Handling Chemical Safety
- Niosh - Registry of Toxic Effects of Chemical Substances
- INRS - Fiche Toxicologique (toxicological sheet)
- Patty - Industrial Hygiene and Toxicology
- N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition
- ECHA website
- Database of SDS models for chemicals - Ministry of Health and ISS (Istituto Superiore di Sanità) - Italy

- Hazard Products Regulation (HPR)
- WHMIS 2015
- ONTARIO R.R.O. 1990, Regulation 883 (version July 2016)
- IARC website
- NTP. 2011. Report on Carcinogens, 12th Edition.
- OSHA website
- Cal/OSHA website
- California Safe Drinking Water and Toxic Enforcement Act

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
Product classification derives from criteria established by the Canada`s Hazardous Products Regulations (HPR) (WHMIS 2015), unless determined otherwise in Section 11 and 12. The data for evaluation of chemical-physical properties are reported in section 9.