

# 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: **411 00 19860-6290**  
Product name: **EPOXY PRIMER BOTTOM**

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

Intended use: **Primer filling primer for metals**

### 1.3. Details of the supplier of the safety data sheet

Name: **Meccanocar Italia S.r.l.**  
Full address: **Via San Francesco, 22**  
District and Country: **56033 Capannoli (PI)**  
**Italy**  
**Tel. +39 0587 609433**  
**Fax +39 0587 607145**

e-mail address of the competent person  
responsible for the Safety Data Sheet

**moreno.meini@meccanocar.it**

### 1.4. Emergency telephone number

For urgent inquiries refer to

**National Poisons Information Service: +44 121 507 4123**

## 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:

Aerosol, category 1	H222 H229	Extremely flammable aerosol. Pressurised container: may burst if heated.
Serious eye damage, category 1	H318	Causes serious eye damage.
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 3	H412	Harmful to aquatic life with long lasting effects.

### 2.2. Label elements

## EPOXY PRIMER BOTTOM

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

Hazard pictograms:



Signal words: Danger

Hazard statements:

<b>H222</b>	Extremely flammable aerosol.
<b>H229</b>	Pressurised container: may burst if heated.
<b>H318</b>	Causes serious eye damage.
<b>H315</b>	Causes skin irritation.
<b>H317</b>	May cause an allergic skin reaction.
<b>H336</b>	May cause drowsiness or dizziness.
<b>H412</b>	Harmful to aquatic life with long lasting effects.
<b>EUH211</b>	Warning! In case of vaporization dangerous respirable droplets may form. Do not breathe vapor or mist.

Precautionary statements:

<b>P210</b>	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
<b>P251</b>	Do not pierce or burn, even after use.
<b>P410+P412</b>	Protect from sunlight. Do not expose to temperatures exceeding 50°C / 122°F.
<b>P211</b>	Do not spray on an open flame or other ignition source.
<b>P305+P351+P338</b>	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
<b>P280</b>	Wear protective gloves/ protective clothing / eye protection / face protection.
<b>P101</b>	If medical advice is needed, have product container or label at hand.
<b>P102</b>	Keep out of reach of children.
<b>P260</b>	Do not breathe dust / fume / gas / mist / vapours / spray.
<b>P310</b>	Immediately call a POISON CENTER / doctor.
<b>P501</b>	Dispose of contents / container in accordance with local regulations.

<b>Contains:</b>	BISPHENOL (EPOXY RESIN) ACETONE N-BUTYL ACETATE BUTANOL
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### 2.3. Other hazards

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

## SECTION 3. Composition/information on ingredients

### 3.2. Mixtures

Contains:

Identification	x = Conc. %	Classification 1272/2008 (CLP)
METHYL OXIDE DIMETHYLETER		

## EPOXY PRIMER BOTTOM

CAS 115-10-6	$45 \leq x < 47,5$	Flam. Gas 1A H220, Press. Gas H280
EC 204-065-8		
INDEX -		
Reg. no. 01-2119472128-37-XXXX		
<b>ACETONE</b>		
CAS 67-64-1	$15 \leq x < 16,5$	Flam. Liq. 2 H225, Eye Irrit. 2 H319, STOT SE 3 H336, EUH066
EC 200-662-2		
INDEX 606-001-00-8		
Reg. no. 01-2119471330-49-XXXX		
<b>N-BUTYL ACETATE</b>		
CAS 123-86-4	$15 \leq x < 16,5$	Flam. Liq. 3 H226, STOT SE 3 H336, EUH066
EC 204-658-1		
INDEX 607-025-00-1		
Reg. no. 01-2119485493-29-XXXX		
<b>BUTANOL</b>		
CAS 71-36-3	$8 \leq x < 9$	Flam. Liq. 3 H226, Acute Tox. 4 H302, Eye Dam. 1 H318, Skin Irrit. 2 H315, STOT SE 3 H335, STOT SE 3 H336
EC 200-751-6		
INDEX 603-004-00-6		
Reg. no. 01-2119484630-38-XXXX		
<b>TITANIUM DIOXIDE</b>		
CAS 13463-67-7	$4,5 \leq x < 5$	Carc. 2 H351
EC 236-675-5		
INDEX -		
Reg. no. 01-2119489379-17-XXXX		
<b>ETHYLBENZENE AND XYLENE REACTION MASS</b>		
CAS -	$4,5 \leq x < 5$	Flam. Liq. 3 H226, Acute Tox. 4 H312, Acute Tox. 4 H332, Skin Irrit. 2 H315, Aquatic Acute 1 H400 M=1
EC 905-588-0		
INDEX -		
Reg. no. 01-2119486136-34-XXXX		
<b>ZINC OXIDE</b>		
CAS 1314-13-2	$2 \leq x < 2,5$	Aquatic Chronic 1 H410 M=1
EC 215-222-5		
INDEX 030-013-00-7		
Reg. no. 01-2119463881-32-XXXX		
<b>PROPAN-2-OL</b>		
CAS 67-63-0	$2 \leq x < 2,5$	Flam. Liq. 2 H225, Eye Irrit. 2 H319, STOT SE 3 H336
EC 200-661-7		
INDEX 603-117-00-0		
Reg. no. 01-2119457558-25-XXXX		
<b>TRIZINC BIS (ORTHOPHOSPHATE)</b>		
CAS 7779-90-0	$2 \leq x < 2,5$	Aquatic Chronic 1 H410 M=1
EC 231-944-3		
INDEX 030-011-00-6		

## EPOXY PRIMER BOTTOM

Reg. no. 01-2119485044-40-XXXX

**BISPHENOL (EPOXY RESIN)**

CAS 25036-25-3

$2 \leq x < 2,5$

Eye Irrit. 2 H319, Skin Irrit. 2 H315, Skin Sens. 1 H317

EC 682-390-8

INDEX -

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

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

Percentage of propellants: 45,00 %

**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. Wash contaminated clothing before using it again.

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

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

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

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

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

Information not available

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

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

**UNSUITABLE EXTINGUISHING EQUIPMENT**

None in particular.

**5.2. Special hazards arising from the substance or mixture****HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE**

If overheated, aerosol cans can deform, explode and be propelled considerable distances. Put a protective helmet on before approaching the fire. Do not breathe combustion products.

**5.3. Advice for firefighters****GENERAL INFORMATION**

Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear.

**SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS**

Normal fire fighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).

## SECTION 6. Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

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

### 6.2. Environmental precautions

Do not disperse in the environment.

### 6.3. Methods and material for containment and cleaning up

Use inert absorbent material to soak up leaked product. Make sure the leakage site is well aired. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

### 6.4. Reference to other sections

Any information on personal protection and disposal is given in sections 8 and 13.

## SECTION 7. Handling and storage

### 7.1. Precautions for safe handling

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

### 7.2. Conditions for safe storage, including any incompatibilities

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

### 7.3. Specific end use(s)

Information not available

## SECTION 8. Exposure controls/personal protection

### 8.1. Control parameters

Regulatory References:

ESP	España	LÍMITES DE EXPOSICIÓN PROFESIONAL PARA AGENTES QUÍMICOS EN ESPAÑA 2019 (INSST)
FRA	France	Valeurs limites d'exposition professionnelle aux agents chimiques en France. ED 984 - INRS
GBR	United Kingdom	EH40/2005 Workplace exposure limits (Third edition, published 2018)
ITA	Italia	DIRETTIVA (UE) 2017/164 DELLA COMMISSIONE del 31 gennaio 2017
NOR	Norge	Fastsatt av Arbeids- og sosialdepartementet 21. august 2018 med hjemmel i lov 17. juni 2005 nr. 62 om arbeidsmiljø, arbeidstid, stillingsvern mv. (arbeidsmiljøloven) § 1-3, § 1-4 og § 4-5
PRT	Portugal	Ministério da Economia e do Emprego Consolida as prescrições mínimas em matéria de protecção dos trabalhadores contra os riscos para a segurança e a saúde devido à exposição a agentes químicos no trabalho - Diário da República, 1.ª série - N.º 111 - 11 de junho de 2018
EU	OEL EU	Directive (EU) 2017/2398; Directive (EU) 2017/164; Directive 2009/161/EU; Directive 2006/15/EC; Directive

## EPOXY PRIMER BOTTOM

TLV-ACGIH

2004/37/EC; Directive 2000/39/EC; Directive 91/322/EEC.  
ACGIH 2019**METHYL OXIDE DIMETHYLETER****Threshold Limit Value**

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
VLEP	ITA	983	400			INHAL

**Predicted no-effect concentration - PNEC**

Normal value in fresh water				1,55		mg/l
Normal value in marine water				0,16		mg/l
Normal value for fresh water sediment				6,581		mg/kg
Normal value for marine water sediment				0,69		mg/kg
Normal value for water, intermittent release				1,549		mg/l
Normal value for the terrestrial compartment				0,45		mg/kg

**Health - Derived no-effect level - DNEL / DMEL**

Route of exposure	Effects on consumers			Effects on workers				
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Inhalation				471 mg/m3		NPI		1894 mg/m3

**N-BUTYL ACETATE****Threshold Limit Value**

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
VLA	ESP	724	150	965	200	
VLEP	FRA	710	150	940	200	
WEL	GBR	724	150	966	200	
TLV	NOR		75			
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
Normal value for marine water sediment				0,098		mg/kg
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**

Route of exposure	Effects on consumers			Effects on workers				
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral		2 mg/kg bw/d		2 mg/kg bw/d				
Inhalation	300 mg/m3	300 mg/m3	35,7 mg/m3	35,7 mg/m3	600 mg/m3	600 mg/m3	300 mg/m3	300 mg/m3
Skin		6 mg/kg bw/d		6 mg/kg bw/d		11 mg/kg bw/d		11 mg/kg bw/d

**ACETONE****Threshold Limit Value**

## EPOXY PRIMER BOTTOM

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
VLEP	FRA	1210	500	2420	1000	
WEL	GBR	1210	500	3620	1500	
VLEP	ITA	1210	500			
TLV	NOR	295	125			
VLE	PRT	1210	500			
OEL	EU	1210	500			
TLV-ACGIH			250		500	

## Predicted no-effect concentration - PNEC

Normal value in fresh water				10,6		mg/l		
Normal value in marine water				1,06		mg/l		
Normal value for fresh water sediment				30,4		mg/kg		
Normal value for marine water sediment				3,04		mg/kg		
Normal value of STP microorganisms				100		mg/l		
Normal value for the terrestrial compartment				29,5		mg/kg		

## Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers			Effects on workers				
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral				62 mg/kg bw/d				
Inhalation				200 mg/m3			2420 mg/m3	1210 mg/m3
Skin				62 mg/kg bw/d				186 mg/kg bw/d

## BUTANOL

## Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
VLA	ESP	61	20	154	50	
VLEP	FRA			150	50	
WEL	GBR			154	50	SKIN
TLV	NOR	75	25			SKIN
TLV-ACGIH		61	20			

## Predicted no-effect concentration - PNEC

Normal value in fresh water				0,082		mg/l		
Normal value in marine water				0,008		mg/l		
Normal value for fresh water sediment				0,324		mg/kg		
Normal value for marine water sediment				0,032		mg/kg		
Normal value of STP microorganisms				2476		mg/l		
Normal value for the terrestrial compartment				0,017		mg/kg		

## Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers			Effects on workers				
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral				1,562 mg/kg				

## EPOXY PRIMER BOTTOM

Inhalation	155 mg/m3	bw/d 55,357 mg/m3	310 mg/m3
Skin		3,125 mg/kg bw/d	

## ETHYLBENZENE AND XYLENE REACTION MASS

## 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
Normal value for marine water sediment	12,46	mg/kg
Normal value of STP microorganisms	6,58	mg/l
Normal value for the terrestrial compartment	2,31	mg/kg

## Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers			Effects on workers				
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral				12,5 mg/kg bw/d				
Inhalation	260 mg/m3	260 mg/m3	65,6 mg/m3	65,6 mg/m3	442 mg/m3	442 mg/m3	221 mg/m3	221 mg/m3
Skin				125 mg/kg bw/d				212 mg/kg bw/d

## TITANIUM DIOXIDE

## Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
VLA	ESP	10				
VLEP	FRA	10				
WEL	GBR	4				RESP
WEL	GBR	10				INHAL
TLV	NOR	5				
TLV-ACGIH		10				

## TRIZINC BIS (ORTHOPHOSPHATE)

## Predicted no-effect concentration - PNEC

Normal value in fresh water	2,06	mg/l
Normal value in marine water	0,61	mg/l
Normal value for fresh water sediment	117,8	mg/kg
Normal value for marine water sediment	56,5	mg/kg
Normal value of STP microorganisms	10	mg/l
Normal value for the terrestrial compartment	35,6	mg/kg

## Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers			Effects on workers				
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral				0,83 mg/kg bw/d				
Inhalation				2,5 mg/m3				5 mg/m3
Skin				83 mg/kg bw/d				83 mg/kg bw/d





## EPOXY PRIMER BOTTOM

Oral	0,83 mg/kg bw/d		
Inhalation	2,5 mg/m <sup>3</sup>	0,5 mg/m <sup>3</sup>	5 mg/m <sup>3</sup>
Skin	83 mg/kg bw/d		83 mg/kg bw/d

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

None required.

#### 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.

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

Respiratory protection devices must be used if the technical measures adopted are not suitable for restricting the worker's exposure to the threshold values considered. The protection provided by masks is in any case limited.

#### ENVIRONMENTAL EXPOSURE CONTROLS

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

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

#### N-BUTYL ACETATE

Wear protective gloves. The recommendations are listed below. Other protective material can be used, depending on the situation, if adequate data on degradation and permeation are available. If other chemicals are used together with this chemical, the selection of materials should be based on the protection of all chemicals present.

#### ACETONE

Protective gloves according to EN 374.

Glove material: Butyl rubber (butyl rubber) - Layer thickness >= 0.5 mm.

Breakthrough time:> 480 min.

Observe the glove manufacturer's instructions regarding penetrability and breakthrough time.

#### BUTANOL

Chemical resistant protective gloves (EN 374)

Suitable materials also with prolonged direct contact (Recommended: protection index 6, corresponding to > 480 minutes of permeation time according to EN 374):

butyl rubber (butyl) - coating thickness 0.7 mm

nitrile rubber (NBR) - coating thickness of 0.4 mm

Additional note: specifications are based on tests, literature data and information from glove manufacturers or derive from similar substances by analogy. Due to many conditions (eg temperature), it should be considered that the practical use of a chemical protective glove in practice can be much shorter than the breakthrough time determined through testing.

#### TRIZINC BIS (ORTHOPHOSPHATE)

Chemical protective gloves (EN 374) e.g. nitrile rubber (0.4 mm), chloroprene rubber (0.5 mm), polyvinyl chloride (0.7 mm), among others. Due to a large variety of types, it is necessary to follow the manufacturer's instructions.

#### PROPAN-2-OL

Respiratory protection: personal respiratory protection devices are normally not required. In inadequately ventilated areas, where workplace limits are exceeded, where there are unpleasant odors or where aerosols are present or smoke and fog occur, use a self-contained breathing apparatus or self-contained breathing apparatus with a type A filter or an appropriate combined filter, in compliance with EN 141.

Hand protection: the choice of an appropriate glove depends not only on its material but also on other quality characteristics and is different from one manufacturer to another. Observe the permeability and breakthrough time instructions provided by the glove supplier. Also take into consideration the specific local conditions in which the product is used, such as the danger of cuts, abrasions and contact times., Keep in mind that in daily use the durability of a chemical resistant protective glove can be considerably less than breakthrough time measured according to EN 374.

#### ZINC OXIDE

Protective gloves (EN 374)

## SECTION 9. Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Appearance	aerosol
Colour	light grey
Odour	characteristic
Odour threshold	Not available
pH	Not available
Melting point / freezing point	Not available
Initial boiling point	Not available
Boiling range	Not available
Flash point	Not available
Evaporation rate	Not available
Flammability (solid, gas)	Not available
Lower inflammability limit	1,2 % (V/V)

## EPOXY PRIMER BOTTOM

Upper inflammability limit	26,2 % (V/V)
Lower explosive limit	Not available
Upper explosive limit	Not available
Vapour pressure	247 hPa
Vapour density	Not available
Relative density	1,23
Solubility	partially soluble in water
Partition coefficient: n-octanol/water	Not available
Auto-ignition temperature	240 °C
Decomposition temperature	Not available
Viscosity	Not available
Explosive properties	Not available
Oxidising properties	Not available

**9.2. Other information**

Total solids (250°C / 482°F)	8,40 %
VOC (Directive 2010/75/EC) :	90,50 % - 724,00 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.

**N-BUTYL ACETATE**

Decomposes on contact with: water.

**ACETONE**

Decomposes under the effect of heat.

Acetone reacts in the presence of bases. The vapor forms potentially explosive mixtures with the air. Heavier than air, they proceed at floor level and can flash at a great distance when turned on. It can electrostatically charge.

**BUTANOL**

Attacks various types of plastic materials.

Vapors can form an explosive mixture with air.

**10.2. Chemical stability**

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

**10.3. Possibility of hazardous reactions**

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

**METHYL OXIDE DIMETHYLETER**

Vapors can form an explosive mixture 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.

Vapors can form an explosive mixture with air.

**ACETONE**

Risk of explosion on contact with: bromine trifluoride,fluorine dioxide,hydrogen peroxide,nitrosyl chloride,2-methyl-1,3 butadiene,nitromethane,nitrosyl perchlorate.May react dangerously with: potassium tert-butoxide,alkaline hydroxides,bromine,bromoform,isoprene,sodium,sulphur dioxide,chromium trioxide,chromyl chloride,nitric acid,chloroform,peroxymonosulphuric acid,phosphoryl oxychloride,chromosulphuric acid,fluorine,strong oxidising agents,strong reducing agents.Develops flammable gas on contact with: nitrosyl perchlorate.

**BUTANOL**

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

Reacts with strong oxidizing agents.

**PROPAN-2-OL**

Vapors can form an explosive mixture with air.

**10.4. Conditions to avoid**

Avoid overheating.

**METHYL OXIDE DIMETHYLETER**

Temperature:> 52 ° C

**N-BUTYL ACETATE**

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

Avoid contact with heat, sparks, open flames and static discharge. Avoid any source of ignition.

**ACETONE**

Avoid exposure to: sources of heat,naked flames.

Highly flammable. Concentrated vapors are heavier than air. Forms explosive mixtures with air, even in empty and uncleaned containers. It can produce, if mixed with chlorinated hydrocarbons and exposed to light, highly irritating chlorine acetone.

**BUTANOL**

Avoid exposure to: sources of heat, naked flames.

**10.5. Incompatible materials**

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

**METHYL OXIDE DIMETHYLETER**

Oxygen, oxidizing agents, acid anhydrides, strong acids, carbon monoxide, acetic anhydride, powdered metals.

**N-BUTYL ACETATE**

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

Strong acids and strong bases, strong oxidizing agents.

**ACETONE**

Incompatible with: acids, oxidising substances.

Attacks many plastics and rubbers. Condensation may form on contact with barium hydroxide, sodium hydroxide and many other alkaline materials. Avoid contact with strong oxidizing agents, alkalis and amines.

**BUTANOL**

Strong oxidizing agents.

**ZINC OXIDE**

Acids and basics.

**10.6. Hazardous decomposition products****METHYL OXIDE DIMETHYLETER**

Formaldehyde, carbon dioxide (CO<sub>2</sub>), carbon monoxide, methanol.

**ACETONE**

May develop: ketenes, irritant substances.

In case of fire the following can be released: carbon monoxide and carbon dioxide.

ZINC OXIDE

ZnO fumes can be generated during heat treatment.

## SECTION 11. Toxicological information

### 11.1. Information on toxicological effects

#### Metabolism, toxicokinetics, mechanism of action and other information

Information not available

#### Information on likely routes of exposure

N-BUTYL ACETATE

WORKERS: inhalation; contact with the skin.

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

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

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

LC50 (Inhalation) of the mixture:

> 20 mg/l

LD50 (Oral) of the mixture:

>2000 mg/kg

LD50 (Dermal) of the mixture:

>2000 mg/kg

PROPAN-2-OL

LD50 (Oral) 4710 mg/kg Rat

**EPOXY PRIMER BOTTOM**

LD50 (Dermal) 12800 mg/kg Rat

LC50 (Inhalation) 72,6 mg/l/4h Rat

**TITANIUM DIOXIDE**

LD50 (Oral) > 10000 mg/kg Rat

**BUTANOL**

LD50 (Oral) 790 mg/kg Rat

LD50 (Dermal) 3400 mg/kg Rabbit

LC50 (Inhalation) 8000 ppm/4h Rat

**TRIZINC BIS (ORTHOPHOSPHATE)**

LD50 (Oral) > 5000 mg/kg Rat - Wistar

LC50 (Inhalation) > 5,7 mg/l Rat

**METHYL OXIDE DIMETHYLETER**

LC50 (Inhalation) 164000 ppm/4h rat

**METHYL OXIDE DIMETHYLETER**

Method: Not indicated

Reliability: 2

Species: Rat (albino ChR-CD; male)

Route of exposure: Inhalation (gas)

Results: LC50: 164 000 ppm

**N-BUTYL ACETATE**

Method: Equivalent or similar to OECD 423

Reliability: 2

Species: Rat (Sprague-Dawley; male / female)

Route of exposure: Oral

Results: LD50 = 12.2 mL / kg bw

Method: Equivalent or similar to OECD 402

Reliability: 2

Species: Rabbit (New Zealand White; male / female)

Route of exposure: Dermal

Results: LD50> 16 mL / kg bw

**ACETONE**



**EPOXY PRIMER BOTTOM**

Method: Not indicated

Reliability: 2

Species: Rat (Sprague-Dawley)

Route of exposure: Oral

Results: LD50 = 5800 mg / kg bw

Bibliographic reference: Acetone potentiation of acute acetonitrile toxicity, Freeman JJ, Hayes EP (1985)

**ETHYLBENZENE AND XYLENE REACTION MASS**

Method: Equivalent or similar to EU Method B.2

Reliability: 1

Species: Rat (male)

Route of exposure: Inhalation (vapors)

Results: LC50 6 700 ppm

**PROPAN-2-OL**

Method: Equivalent or similar to OECD 401

Reliability: 2

Species: Rat (Sherman)

Route of exposure: Oral

Results: LD50: 5.84 other: g / kg body weight

Bibliographic reference: Smyth HF & Carpenter CP, FURTHER EXPERIENCE WITH THE RANGE FINDING TEST IN THE INDUSTRIAL TOXICOLOGY LABORATORY (1948)

Method: Equivalent or similar to OECD 403

Reliability: 1

Species: Rat (Fischer 344; male / female)

Route of exposure: Inhalation (vapor)

Results: LC50: ca. 5,000 ppm

Method: Equivalent or similar to OECD 402

Reliability: 2

Species: Rabbit

Route of exposure: Dermal

Results: LD50: 16.4 mL / kg bw

Bibliographic reference: Smyth HF & Carpenter CP, FURTHER EXPERIENCE WITH THE RANGE FINDING TEST IN THE INDUSTRIAL TOXICOLOGY LABORATORY (1948)

**ZINC OXIDE**

Method: Equivalent or similar to OECD 401

Reliability: 2

Species: Rat (Wistar; male / female)

Route of exposure: Oral

Results: LD50> 5 000 mg / kg bw

Method: Equivalent or similar to OECD 403

Reliability: 2

Species: Rat (male / female)

Route of exposure: Inhalation

Results: LC50> 5 700 mg / m<sup>3</sup> air

Method: OECD 402

Reliability: 1

Species: Rat (Wistar; male / female)

Route of exposure: Dermal

Results: LD50> 2 000 mg / kg bw

**SKIN CORROSION / IRRITATION**

Causes skin irritation

**N-BUTYL ACETATE**

Method: Equivalent or similar to OECD 404

**EPOXY PRIMER BOTTOM**

Reliability: 2  
Species: Rabbit (New Zealand White)  
Route of exposure: Dermal  
Results: Not irritating

**BUTANOL**

Method: Not indicated  
Reliability: 2  
Species: Rabbit (Vienna White)  
Route of exposure: Dermal  
Results: Irritating, category 2

**PROPAN-2-OL**

Method: Not indicated  
Reliability: 2  
Species: Rabbit  
Route of exposure: Dermal  
Results: Not classified  
Bibliographic reference: Nixon G, Tyson C & Wertz W, Interspecies Comparisons of Skin Irritancy (1975)

**ZINC OXIDE**

Method: Not indicated  
Reliability: 2  
Species: Rabbit (New Zealand White)  
Route of exposure: Dermal  
Results: Not irritating

**SERIOUS EYE DAMAGE / IRRITATION**

Causes serious eye damage

**N-BUTYL ACETATE**

Method: OECD 405  
Reliability: 2  
Species: Rabbit (New Zealand White)  
Route of exposure: Ocular  
Results: Not irritating

**BUTANOL**

Method: OECD 405  
Reliability: 1  
Species: Rabbit (New Zealand White)  
Route of exposure: Ocular  
Results: Positive, category 1

**TRIZINC BIS (ORTHOPHOSPHATE)**

Method: OECD 405  
Reliability: 1  
Species: Rabbit (New Zealand White)  
Route of exposure: Ocular  
Results: Not irritating

**PROPAN-2-OL**

**EPOXY PRIMER BOTTOM**

Method: Equivalent or similar to OECD 405

Reliability: 1

Species: Rabbit (New Zealand White)

Route of exposure: Ocular

Results: Category 2

**ZINC OXIDE**

Method: EU Method B.5

Reliability: 1

Species: Rabbit (New Zealand White)

Route of exposure: Ocular

Results: Not irritating

**RESPIRATORY OR SKIN SENSITISATION**

Sensitising for the skin

**ACETONE**

Method: Not indicated

Reliability: 2

Species: guinea pig (Hartley; female)

Route of exposure: Dermal

Results: Not sensitizing

Bibliographic reference: A new protocol and criteria for quantitative determination of sensitization potencies of chemicals by guinea pig maximization test, Nakamura A, Momma J, Sekiguchi H, Noda T, Yamano T, Kaniwa MA, Kojima S, Tsuda M, Kurokawa Y (1994 )

**PROPAN-2-OL**

Method: OECD 406

Reliability: 1

Species: guinea pig (Hartley; male / female)

Route of exposure: Dermal

Results: Not sensitizing

Skin sensitization

**TITANIUM DIOXIDE**

Method: Equivalent or similar to OECD Guideline 429

Reliability: 1

Species: Mouse (CBA / JHsd; female)

Route of exposure: Dermal

Results: Not sensitizing

**TRIZINC BIS (ORTHOPHOSPHATE)**

Method: OECD 406

Reliability: 1

Species: guinea pig (Dunkin-Hartley; female)

Route of exposure: Dermal

Results: Not sensitizing

**ZINC OXIDE**

Method: OECD 406

Reliability: 1

Species: guinea pig (Dunkin-Hartley; females)

Route of exposure: Dermal

**EPOXY PRIMER BOTTOM**

Results: Not sensitizing

**GERM CELL MUTAGENICITY**

Does not meet the classification criteria for this hazard class

**METHYL OXIDE DIMETHYLETER**

Method: OECD 471 in vitro test

Reliability: 1

Species: *S. typhimurium*

Results: Negative

Method: Equivalent or similar to OECD 477 in vivo test

Reliability: 2

Species: *Drosophila melanogaster* (male)

Route of exposure: Inhalation (gas)

Results: Negative

**N-BUTYL ACETATE**

Method: Equivalent or similar to OECD 471 in vitro test

Reliability: 2

Species: *S. typhimurium*, *E. Coli*

Results: Negative with and without metabolic activation

Method: OECD 474-test in vivo

Reliability: 2

Species: Mouse (NMRI; male / female)

Route of exposure: Oral

Results: Negative

**BUTANOL**

Method: OECD 476 in vitro test

Reliability: 1

Species: Chinese hamster

Results: Negative with or without metabolic activation

Method: OECD 474-test in vivo

Reliability: 1

Species: Mouse (NMRI; male / female)

Route of exposure: Oral

Results: Negative

**ETHYLBENZENE AND XYLENE REACTION MASS**

Method: Equivalent or similar OECD Guideline 478-test in vivo

Reliability: 2

Species: Mouse (Swiss Webster; male / female)

Route of exposure: Subcutaneous

Results: Negative

**TITANIUM DIOXIDE**

Method: EPA OPPTS 870.5375 - In vitro Mammalian Chromosome Aberration Test

Reliability: 2

Species: Chinese hamster

Results: Negative

**TRIZINC BIS (ORTHOPHOSPHATE)**

**EPOXY PRIMER BOTTOM**

Method: Not indicated - in vitro test

Reliability: 2

Species: Lymphoma mouse

Results: Negative

Bibliographic reference: Amacher DE & Paillet SC, Induction of trifluorothymidine-resistant mutants by metal ions in L5178y / TK +/- cells (1980)

Method: Not indicated - in vivo test

Reliability: 2

Species: Mouse (NMRI; male / female)

Route of exposure: Intraperitoneal

Results: Negative

Bibliographic reference: Gocke E, King M-T, Eckhardt K & Wild D, Mutagenicity of Cosmetics Ingredients Licensed by the European Communities (1981)

**PROPAN-2-OL**

Method: Equivalent or similar to OECD 476 in vitro test

Reliability: 1

Species: Chinese hamster

Results: Negative with or without metabolic activation

Bibliographic reference:

Method: Equivalent or similar to OECD 474 in vivo test

Reliability: 2

Species: Mouse (ICR; male / female)

Route of exposure: Oral

Results: Negative

**ZINC OXIDE**

Method: Equivalent or similar to OECD 471 in vitro test

Reliability: 2

Species: S. typhimurium

Results: Negative with and without metabolic activation

Method: OECD 474-test in vivo

Reliability: 1

Species: Mouse (NMRI; male)

Route of exposure: intraperitoneal

Results: Negative

**CARCINOGENICITY**

Does not meet the classification criteria for this hazard class

**METHYL OXIDE DIMETHYLETER**

Method: Equivalent or similar to OECD 453

Reliability: 1

Species: Rat (CD (R) (SD) BR; male / female)

Route of exposure: Inhalation (vapors)

Results: Negative

**ACETONE**

Method: Not indicated

Reliability: 2

Species: Mouse (ICR; female)

Route of exposure: Dermal

Results: Negative

Bibliographic reference: Mouse skin carcinogenicity tests of the flame retardants tris (2,3-dibromopropyl) phosphate, tetrakis (hydroxymethyl) phosphonium chloride, and polyvinyl bromide, Van Duuren BL, Loewengart G, Seldman I, Smith AC, Melchionne S (1974)

**ETHYLBENZENE AND XYLENE REACTION MASS**

**EPOXY PRIMER BOTTOM**

Method: Equivalent or similar to EU Method B.32

Reliability: 2

Species: Rat (F344 / N; male / female)

Route of exposure: Oral

Results: Negative

**TITANIUM DIOXIDE**

Reliability: 2

Species: Mouse (B6C3F1; male / female)

Route of exposure: Oral

Results: NOEL 50000 ppm

**TRIZINC BIS (ORTHOPHOSPHATE)**

Method: Not indicated

Reliability: 2

Species: Mouse (Chester Beatty stock; male / female)

Route of exposure: Oral

Results: NOAEL > 22 000 mg / L

Bibliographic reference: Walters M & Roe FJC, A Study of the Effects of Zinc and Tin Administered Orally to Mice Over a Prolonged Period (1965)

**ZINC OXIDE**

Method: Not indicated

Reliability: 2

Species: Mouse (Chester Beatty stock; male / female)

Route of exposure: Oral

Results: NOAEL > 22 000 mg / L

Bibliographic reference: Walters M & Roe FJC, A Study of the Effects of Zinc and Tin Administered Orally to Mice Over a Prolonged Period (1965)

**REPRODUCTIVE TOXICITY**

Does not meet the classification criteria for this hazard class

**METHYL OXIDE DIMETHYLETER**

Method: Equivalent or similar to OECD 452

Reliability: 1

Species: Rat (CD (SD) BR; male / female)

Route of exposure: Inhalation (vapors)

Results: Negative

**PROPAN-2-OL**

Method: Equivalent or similar to OECD 416

Reliability: 1

Species: Rat (Sprague-Dawley; male / female)

Route of exposure: Oral

Results: NOAEL 500

Adverse effects on sexual function and fertility

**N-BUTYL ACETATE**

Method: OECD 416

Reliability: 1

Species: Rat (Sprague-Dawley; male / female)

Route of exposure: Inhalation (vapors)

Results: Negative, NOAEC (fertility) = 750 ppm

**EPOXY PRIMER BOTTOM****TRIZINC BIS (ORTHOPHOSPHATE)**

Method: Equivalent or similar to OECD 416

Reliability: 2

Species: Rat (Sprague-Dawley; male / female)

Route of exposure: Oral

Results: NOAEL 15 mg / kg bw / day

**ZINC OXIDE**

Method: Equivalent or similar to OECD 416

Reliability: 2

Species: Rat (Sprague-Dawley; male / female)

Route of exposure: Oral

Results: LOAEL (fertility) 7.5 mg / kg bw / day

Adverse effects on development of the offspring

**N-BUTYL ACETATE**

Method: Equivalent or similar to OECD 414

Reliability: 1

Species: Rat (Sprague-Dawley)

Route of exposure: Inhalation (vapors)

Results: Positive, NOAEC (development) = 1500 ppm

**ACETONE**

Method: Equivalent or similar to OECD 414

Reliability: 1

Species: Rat (Sprague-Dawley)

Route of exposure: Inhalation (vapors)

Results: Negative, NOAEC (development) = 2200 ppm

**ETHYLBENZENE AND XYLENE REACTION MASS**

Method: Equivalent or similar OECD Guideline 414

Reliability: 2

Species: Rat (Sprague-Dawley)

Route of exposure: Inhalation (vapors)

Results: NOAEC 500 ppm

**TITANIUM DIOXIDE**

Method: OECD Guideline 414

Reliability: 1

Species: Mouse (Wistar)

Route of exposure: Oral

Results: NOAEL 1 000 mg / kg bw / day

**TRIZINC BIS (ORTHOPHOSPHATE)**

Method: Not indicated

Reliability: 2

Species: Hamster

Route of exposure: Oral

Results: NOAEL 88 mg / kg bw / day

**ZINC OXIDE**

**EPOXY PRIMER BOTTOM**

Method: OECD 414  
Reliability: 1  
Species: Rat (Wistar)  
Route of exposure: Inhalation (aerosol)  
Results: NOAEC (development) 7.5 mg / m<sup>3</sup> air

STOT - SINGLE EXPOSURE

May cause drowsiness or dizziness

## METHYL OXIDE DIMETHYLETER

Based on available data and through expert judgment, the substance is not classified in the target organ toxicity class for single exposure.

## N-BUTYL ACETATE

Based on available data and through expert judgment, the substance is classified in the target organ toxicity class for single exposure.

## ACETONE

Based on available data and through expert judgment, the substance is classified in the target organ toxicity class for single exposure.

## ETHYLBENZENE AND XYLENE REACTION MASS

Based on available data and through expert judgment, the substance is not classified in the target organ toxicity class for single exposure.

## TITANIUM DIOXIDE

Based on available data and through expert judgment, the substance is not classified in the target organ toxicity class for single exposure.

## TRIZINC BIS (ORTHOPHOSPHATE)

Based on available data and through expert judgment, the substance is not classified in the target organ toxicity class for single exposure.

## PROPAN-2-OL

Based on available data and by expert judgment, the substance is classified in the target organ toxicity class for single exposure.

## ZINC OXIDE

Based on available data and through expert judgment, the substance is not classified in the target organ toxicity class for single exposure.

Target organ  
N-BUTYL ACETATE

Central nervous system.

## ACETONE

Narcotic effects

Route of exposure  
ACETONE



**EPOXY PRIMER BOTTOM**

Inhalation

PROPAN-2-OL

inhalation

STOT - REPEATED EXPOSURE

Does not meet the classification criteria for this hazard class

METHYL OXIDE DIMETHYLETER

Method: Equivalent or similar to OECD 452

Reliability: 1

Species: Rat (CrI: CD (R) (SD) BR; male / female)

Route of exposure: Inhalation (vapors)

Results: Positive, NOAEL = 2.5%

N-BUTYL ACETATE

Method: EPA OTS 798.2650

Reliability: 2

Species: Rat (Sprague-Dawley; male / female)

Route of exposure: Oral

Results: NOAEL = 125 mg / kg bw / day

Method: EPA OTS 798.2450

Reliability: 1

Species: Rat (Sprague-Dawley; male / female)

Route of exposure: Inhalation (vapors)

Results: Negative, NOAEC = 500 ppm

ACETONE

Method: Equivalent or similar to OECD 408

Reliability: 1

Species: Rat (Fischer 344; male / female)

Route of exposure: Oral

Results: Negative, NOAEL = 10000 ppm

Method: Not indicated

Reliability: 2

Species: Rat (Sprague-Dawley; male)

Route of exposure: Inhalation

Results: Negative, NOAEC = 19000 ppm

Bibliographic reference: Evaluation of toluene and acetone inhalant abuse. II. Model development and toxicology, Bruckner JV, Peterson RG (1981)

Method: Not indicated

Reliability: 2

Species: Not indicated

Route of exposure: Dermal

Results: Negative

Bibliographic reference: Pathology of aging female SENCAR mice used as controls in skin two-stage carcinogenesis studies, Ward J, Quander RD, Wenk M, Spangler E (1986)

BUTANOL

Method: OECD SIDS n-Butyl Alcohol

Reliability: 1

Species: Rat (Sprague-Dawley; male / female)

Route of exposure: Oral

Results: NOEL 125 mg / kg bw / day

Method: EPA OTS 798.2450

Reliability: 1

Species: Rat (Sprague-Dawley)  
Route of exposure: Inhalation (vapors)  
Results: NOEL 500 ppm

#### ETHYLBENZENE AND XYLENE REACTION MASS

Method: Equivalent or similar to EU Method B.32  
Reliability: 2  
Species: Rat (F344 / N; male / female)  
Route of exposure: Oral  
Results: NOAEL 250 mg / kg bw / day

#### TITANIUM DIOXIDE

Based on available data and expert judgment, the substance is not classified in the target organ toxicity class for prolonged or repeated exposure.

#### TRIZINC BIS (ORTHOPHOSPHATE)

Method: OECD 408  
Reliability: 2  
Species: Rat (Sprague-Dawley; male / female)  
Route of exposure: Oral  
Results: NOAEL 31.52 mg / kg bw / day

#### PROPAN-2-OL

Method: OECD 451  
Reliability: 1  
Species: Rat (Fischer 344; male / female)  
Route of exposure: Inhalation (vapors)  
Results: NOAEC = 5000 ppm

#### ZINC OXIDE

Method: OECD 408  
Reliability: 2  
Species: Rat (Sprague-Dawley; male / female)  
Route of exposure: Oral  
Results: NOAEL 31.52 mg / kg bw  
Method: OECD 413  
Reliability: 1  
Species: Rat (Wistar; male)  
Route of exposure: Inhalation (aerosol)  
Results: NOAEL 1.5 mg / m<sup>3</sup> air  
Method: OECD 410  
Reliability: 2  
Species: Rat (Sprague-Dawley; male / female)  
Route of exposure: Dermal  
Results: LOAEL 75 mg / kg bw / day

#### ASPIRATION HAZARD

Does not meet the classification criteria for this hazard class

## SECTION 12. Ecological information

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

### 12.1. Toxicity

## EPOXY PRIMER BOTTOM

## ZINC OXIDE

LC50 - for Fish	1,1 mg/l/96h Oncorhynchus mykiss
EC50 - for Crustacea	1,7 mg/l/48h Daphnia magna
EC50 - for Algae / Aquatic Plants	0,14 mg/l/72h Pseudokirchnerella subcapitata
Chronic NOEC for Fish	0,53 mg/l
Chronic NOEC for Algae / Aquatic Plants	0,024 mg/l

## N-BUTYL ACETATE

LC50 - for Fish	18 mg/l/96h
EC50 - for Crustacea	44 mg/l/48h
EC50 - for Algae / Aquatic Plants	397 mg/l/72h
EC10 for Algae / Aquatic Plants	196 mg/l/72h
Chronic NOEC for Algae / Aquatic Plants	196 mg/l

## TRIZINC BIS (ORTHOPHOSPHATE)

LC50 - for Fish	0,78 mg/l/96h Pimephales promelas
EC50 - for Crustacea	0,86 mg/l/48h Daphnia magna

## METHYL OXIDE DIMETHYLETER

LC50 - for Fish	4100 mg/l/96h
EC50 - for Crustacea	4400 mg/l/48h
EC50 - for Algae / Aquatic Plants	154,917 mg/l/72h
Chronic NOEC for Fish	4100 mg/l
Chronic NOEC for Crustacea	4400 mg/l

## ETHYLBENZENE AND XYLENE REACTION

MASS	
LC50 - for Fish	2,6 mg/l/96h
EC50 - for Crustacea	1 mg/l/48h
EC50 - for Algae / Aquatic Plants	1,3 mg/l/72h
EC10 for Algae / Aquatic Plants	0,44 mg/l/72h
Chronic NOEC for Algae / Aquatic Plants	0,44 mg/l

**12.2. Persistence and degradability**

## N-BUTYL ACETATE

Easily degradable in water, 83% in 28 days.

## ACETONE

Easily degradable in water, 90.9% in 28 days.

## BUTANOL

Quickly biodegradable, 92% in 15 days.

## PROPAN-2-OL

Quickly degradable in water.

## ZINC OXIDE

Solubility in water	2,9 mg/l
NOT rapidly degradable	

## EPOXY PRIMER BOTTOM

## PROPAN-2-OL

Rapidly degradable

## ACETONE

Rapidly degradable

## TITANIUM DIOXIDE

Solubility in water &lt; 0,001 mg/l

Degradability: information not available

## BUTANOL

Solubility in water 1000 - 10000 mg/l

Rapidly degradable

## N-BUTYL ACETATE

Solubility in water 1000 - 10000 mg/l

## TRIZINC BIS (ORTHOPHOSPHATE)

Solubility in water 2,7 mg/l

Degradability: information not available

## METHYL OXIDE DIMETHYLETER

Solubility in water 45600 mg/l

**12.3. Bioaccumulative potential**

## ZINC OXIDE

BCF &gt; 175

## PROPAN-2-OL

Partition coefficient: n-octanol/water 0,05

## ACETONE

Partition coefficient: n-octanol/water -0,23

BCF 3

## BUTANOL

Partition coefficient: n-octanol/water 1

BCF 3,16

## N-BUTYL ACETATE

Partition coefficient: n-octanol/water 2,3

BCF 15,3

## METHYL OXIDE DIMETHYLETER

Partition coefficient: n-octanol/water 0,07 Log Kow

**12.4. Mobility in soil**

## BUTANOL

Partition coefficient: soil/water 0,388

## N-BUTYL ACETATE

Partition coefficient: soil/water &lt; 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 greater 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.

## METHYL OXIDE DIMETHYLETER

It can be used after reconditioning. In accordance with local and national regulations. It must be incinerated in a suitable incineration plant in possession of an authorization issued by the competent authorities.

## ACETONE

Incinerate as hazardous waste according to applicable local, state and federal regulations. Do not throw in household waste.

## PROPAN-2-OL

After pre-treatment and compliance with the regulations for hazardous waste, they must be taken to a permitted hazardous waste landfill or a hazardous waste incinerator.

## ZINC OXIDE

The assignment of a waste code number, according to the European Waste Catalog, should be done in agreement with the regional waste disposal company.

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

ADR / RID, IMDG, 1950

## EPOXY PRIMER BOTTOM

IATA:

**14.2. UN proper shipping name**

ADR / RID: AEROSOLS  
 IMDG: AEROSOLS  
 IATA: AEROSOLS, FLAMMABLE

**14.3. Transport hazard class(es)**

ADR / RID: Class: 2 Label: 2.1  
 IMDG: Class: 2 Label: 2.1  
 IATA: Class: 2 Label: 2.1

**14.4. Packing group**

ADR / RID, IMDG, -  
 IATA:

**14.5. Environmental hazards**

ADR / RID: NO  
 IMDG: NO  
 IATA: NO

**14.6. Special precautions for user**

ADR / RID:	HIN - Kemler: --	Limited Quantities: 1 L	Tunnel restriction code: (D)
	Special Provision: -		
IMDG:	EMS: F-D, S-U	Limited Quantities: 1 L	
		Maximum quantity: 150 Kg	Packaging instructions: 203
IATA:	Cargo:	Maximum quantity: 75 Kg	Packaging instructions: 203
	Pass.:		
	Special Instructions:	A145, A167, A802	

**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: P3a

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

Product  
Point

40

Substances in Candidate List (Art. 59 REACH)

On the basis of available data, the product does not contain any SVHC in percentage greater 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 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:

<b>Flam. Gas 1A</b>	Flammable gas, category 1A
<b>Aerosol 1</b>	Aerosol, category 1
<b>Aerosol 3</b>	Aerosol, category 3
<b>Flam. Liq. 2</b>	Flammable liquid, category 2
<b>Flam. Liq. 3</b>	Flammable liquid, category 3
<b>Press. Gas</b>	Pressurised gas
<b>Carc. 2</b>	Carcinogenicity, category 2

## EPOXY PRIMER BOTTOM

<b>Acute Tox. 4</b>	Acute toxicity, category 4
<b>Eye Dam. 1</b>	Serious eye damage, category 1
<b>Eye Irrit. 2</b>	Eye irritation, category 2
<b>Skin Irrit. 2</b>	Skin irritation, category 2
<b>STOT SE 3</b>	Specific target organ toxicity - single exposure, category 3
<b>Skin Sens. 1</b>	Skin sensitization, category 1
<b>Aquatic Acute 1</b>	Hazardous to the aquatic environment, acute toxicity, category 1
<b>Aquatic Chronic 1</b>	Hazardous to the aquatic environment, chronic toxicity, category 1
<b>Aquatic Chronic 3</b>	Hazardous to the aquatic environment, chronic toxicity, category 3
<b>H220</b>	Extremely flammable gas.
<b>H222</b>	Extremely flammable aerosol.
<b>H229</b>	Pressurised container: may burst if heated.
<b>H225</b>	Highly flammable liquid and vapour.
<b>H226</b>	Flammable liquid and vapour.
<b>H280</b>	Contains gas under pressure; may burst if heated.
<b>H351</b>	Suspected of causing cancer.
<b>H302</b>	Harmful if swallowed.
<b>H312</b>	Harmful in contact with skin.
<b>H332</b>	Harmful if inhaled.
<b>H318</b>	Causes serious eye damage.
<b>H319</b>	Causes serious eye irritation.
<b>H315</b>	Causes skin irritation.
<b>H335</b>	May cause respiratory irritation.
<b>H317</b>	May cause an allergic skin reaction.
<b>H336</b>	May cause drowsiness or dizziness.
<b>H400</b>	Very toxic to aquatic life.
<b>H410</b>	Very toxic to aquatic life with long lasting effects.
<b>H412</b>	Harmful to aquatic life with long lasting effects.
<b>EUH066</b>	Repeated exposure may cause skin dryness or cracking.

## 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**

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- The Merck Index. - 10th Edition
  - Handling Chemical Safety
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  - N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition
  - IFA GESTIS website
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  - Database of SDS models for chemicals - Ministry of Health and ISS (Istituto Superiore di Sanità) - Italy

**Note for users:**

The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product.

This document must not be regarded as a guarantee on any specific product property.

The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.

Provide appointed staff with adequate training on how to use chemical products.

Product's classification is based on the calculation methods set out in Annex I of the CLP Regulation, unless otherwise indicated in sections 11 and 12.

The data for evaluation of chemical-physical properties are reported in section 9.

**Changes to previous review:**

The following sections were modified:

01 / 02 / 03 / 08 / 09 / 10 / 11 / 12 / 13 / 15 / 16.