## **RUST CONVERTER**

Revision nr. 2

Dated 16/07/2020

Printed on 16/07/2020

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Replaced revision:1 (Dated: 14/02/2020)

## 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 11000-2696
Product name RUST CONVERTER

## 1.2. Relevant identified uses of the substance or mixture and uses advised against Intended use It blocks rust transforming it into a hard layer of dark color

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

NameMeccanocar Italia S.r.I.Full addressVia San Francesco, 22District and Country56033 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:

Flammable liquid, category 3	H226	Flammable liquid and vapour.
Eye irritation, category 2	H319	Causes serious eye irritation.
Skin irritation, category 2	H315	Causes skin irritation.

Specific target organ toxicity - single exposure, category 3 H336 May cause drowsiness or dizziness.

Hazardous to the aquatic environment, chronic toxicity, H412 Harmful to aquatic life with long lasting effects.

category 3

#### 2.2. Label elements

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

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## Hazard pictograms:





Signal words: Warning

#### Hazard statements:

H226 Flammable liquid and vapour.
H319 Causes serious eye irritation.
H315 Causes skin irritation.

**H336** May cause drowsiness or dizziness.

H412 Harmful to aquatic life with long lasting effects.

**EUH071** Corrosive to the respiratory tract.

## Precautionary statements:

**P280** Wear protective gloves/ protective clothing / eye protection / face protection.

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

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

P271 Use only outdoors or in a well-ventilated area.

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

Contains: PROPAN-2-OL

ETHYL ACETATE

#### 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)

**XYLENE (MIXTURE OF ISOMERS)** 

CAS 1330-20-7 22,5 ≤ x < 24 Flam. Liq. 3 H226, Acute Tox. 4 H312, Acute Tox. 4 H332, Skin Irrit. 2 H315,

Classification note according to Annex VI to the CLP Regulation: C

EC 215-535-7

INDEX 601-022-00-9

Reg. no. 01-2119488216-32-XXXX

PROPAN-2-OL

CAS 67-63-0 15 ≤ x < 16,5 Flam. Liq. 2 H225, Eye Irrit. 2 H319, STOT SE 3 H336

EC 200-661-7

INDEX 603-117-00-0

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Reg. no. 01-2119457558-25-XXXX **2-METHOXY-1-METHYLETHYL** 

**ACETATE** 

CAS 108-65-6  $15 \le x < 16,5$ 

Flam. Liq. 3 H226, STOT SE 3 H336

EC 203-603-9

INDEX 607-195-00-7

Reg. no. 01-2119475791-29-XXXX

**ETHYL ACETATE** 

CAS 141-78-6 7 ≤ x < 8 Flam. Liq. 2 H225, Eye Irrit. 2 H319, STOT SE 3 H336, EUH066

EC 205-500-4

INDEX 607-022-00-5

Reg. no. 01-2119475103-46-XXXX

ZINC OXIDE

CAS 1314-13-2  $1 \le x < 1,5$  Aquatic Chronic 1 H410 M=1

EC 215-222-5

INDEX 030-013-00-7

Reg. no. 01-2119463881-32-XXXX

PHOSPHORIC ACID

CAS 7664-38-2  $1 \le x < 1,5$  Met. Corr. 1 H290, Acute Tox. 4 H302, Skin Corr. 1B H314, Eye Dam. 1

H318, Classification note according to Annex VI to the CLP Regulation: B

EC 231-633-2

INDEX 015-011-00-6

Reg. no. 01-2119485924-24-XXXX

**NITRIC ACID** 

CAS 7697-37-2 0,5 ≤ x < 0,6 Ox. Liq. 2 H272, Met. Corr. 1 H290, Acute Tox. 3 H331, Skin Corr. 1A H314,

Eye Dam. 1 H318, EUH071, Classification note according to Annex VI to the

CLP Regulation: B

EC 231-714-2

INDEX 007-004-00-1

Reg. no. 01-2119487297-23-XXXX

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

## **SECTION 4. First aid measures**

## 4.1. Description of first aid measures

EYES: Remove contact lenses, if present. Wash immediately with plenty of water for at least 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

## **SECTION 5. Firefighting measures**

#### 5.1. Extinguishing media

#### SUITABLE EXTINGUISHING EQUIPMENT

Extinguishing substances are: carbon dioxide and 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

If large quantities of the product are involved in a fire, they can make it considerably worse. Do not breathe combustion products.

#### 5.3. Advice for firefighters

#### **GENERAL INFORMATION**

In the case of fire, use jets of water to cool the containers to prevent the risk of explosions (product decomposition and excess pressure) and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Remove all containers containing the product from the fire, if it is safe to do so.

## SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS

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

## **SECTION 6. Accidental release measures**

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

Block the leakage if there is no hazard.

Wear suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing. These indications apply for both processing staff and those involved in emergency procedures.

Send away individuals who are not suitably equipped. Use explosion-proof equipment. Eliminate all sources of ignition (cigarettes, flames, sparks, etc.) from the leakage site.

## 6.2. Environmental precautions

The product must not penetrate into the sewer system or come into contact with surface water or ground water.

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

Collect the leaked product into a suitable container. Evaluate the compatibility of the container to be used, by checking section 10. Absorb the remainder with inert absorbent material.

Make sure the leakage site is well aired. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

#### 6.4. Reference to other sections

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

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## **SECTION 7. Handling and storage**

## 7.1. Precautions for safe handling

Ensure that there is an adequate earthing system for the equipment and personnel. Avoid contact with eyes and skin. Do not breathe powders, vapours or mists. Do not eat, drink or smoke during use. Wash hands after use. Avoid leakage of the product into the environment.

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. 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.

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

Store only in the original container. Store in a ventilated and dry place, far away from sources of ignition. Keep containers well sealed. Keep the product in clearly labelled containers. Avoid overheating. Avoid violent blows. Keep containers away from any incompatible materials, see section 10 for details.

Store in a cool and well ventilated place, keep far away from sources of heat, naked flames and sparks and other sources of ignition.

## 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
		2004/37/EC; Directive 2000/39/EC; Directive 91/322/EEC.
	TI V-ACGIH	ACGIH 2019

TLV-ACGIH	ACGIH 207

Туре	Country	TWA/8h		STEL/15min	Remarks / Observations	
		mg/m3	ppm	mg/m3	ppm	
VLA	ESP	221	50	442	100	SKIN
VLEP	FRA	221	50	442	100	SKIN
WEL	GBR	220	50	441	100	SKIN
VLEP	ITA	221	50	442	100	SKIN
TLV	NOR	108	25			SKIN
VLE	PRT	221	50	442	100	SKIN
OEL	EU	221	50	442	100	SKIN
TLV-ACGIH		434	100	651	150	

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Normal value in fresh water				0,327	mg	g/l				
Normal value in marine water				0,327	mç					
Normal value for fresh water se	diment			12,46		g/kg				
Normal value for marine water s				12,46		g/kg				
Normal value of STP microorga				6,58	mç					
Normal value for the terrestrial				2,31		g/kg				
Health - Derived no-effect		OMEL		_,• .		y · · 9				
	Effects on				Effects on workers					
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic	Acute local	Acute	Chronic local	Chronic		
Oral				systemic 12,5 mg/kg		systemic		systemic		
Inhalation	260 mg/m3	260 mg/m3	65,3 mg/m3	bw/d 65,3 mg/m3	442 mg/m3	442 mg/m3	221 mg/m3	221 mg/m3		
Skin	E00 mg/mo	200 mg/mo	oo,o mg/mo	125 mg/kg	<u>.</u>	z mg/m3	i mg/mo	212 mg/kg		
				bw/d				bw/d		
PROPAN-2-OL										
Threshold Limit Value Type	Country	TWA/8h		STEL/15min		Remarks	s /			
1,14.	Country			_		Observa				
VII A	FOD	mg/m3	ppm	mg/m3	ppm					
VLA	ESP	500	200	1000	400					
VLEP	FRA	000	400	980	400					
WEL	GBR	999	400	1250	500					
TLV	NOR	245	100							
TLV-ACGIH	DNEO	492	200	983	400					
Predicted no-effect concentration	on - PNEC			4.40.0		//				
Normal value in fresh water				140,9	mç					
Normal value in marine water				140,9	mç	-				
Normal value for fresh water se				552		g/kg				
Normal value for marine water s				552		g/kg				
Normal value of STP microorga				2251	mç	-				
Normal value for the food chain		ing)		160		g/kg				
Normal value for the terrestrial				28	mg	g/kg				
Health - Derived no-effect	level - DNEL / I	OMEL			Effects on					
Pouto of exposure	consumers	Acuto ovetemi-	Chronia lassi	Chronic	workers	Acuto	Chronic lass!	Chronic		
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	systemic		
Oral				26 mg/kg bw/d						
Inhalation				89 mg/m3				500 mg/m3		
Skin				319 mg/kg bw/d				888 mg/kg bw/d		
2-METHOXY-1-METHYLET Threshold Limit Value	THYL ACETATE									
Type	Country	TWA/8h		STEL/15min		Remarks				
		mg/m3	ppm	mg/m3	ppm	Observa	itions			
VLA	ESP	275	50	550	100	SKIN				
	FRA	275	50	550	100	SKIN				
VLEP		•			100	SKIN				

VLEP	R	UST CONV	ERTER			Prin	ted on 16/07/2020						
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						Rep	laced revision:1 (Date	ed: 14/02/2020)					
	ITA	275	50	550	100	SKIN							
TLV	NOR	270	50			SKIN							
VLE	PRT	275	50	550	100	SKIN							
OEL	EU	275	50	550	100	SKIN							
Predicted no-effect concentrati	on - PNEC												
Normal value in fresh water				0,635	mg	/I							
Normal value in marine water				0,064	mg	/I							
Normal value for fresh water se	ediment			3,29	mg	/kg							
Normal value for marine water	sediment			0,329	mg	/kg							
Normal value of STP microorga	anisms			100	mg	/I							
Normal value for the terrestrial	compartment			0,29	mg	/kg							
Health - Derived no-effec		MEL			Efforts on								
	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		500 mg/kg bw/d		36 mg/kg bw/d				•					
Inhalation			33 mg/m3	33 mg/m3			550 mg/m3	275 mg/m3					
Skin				320 mg/kg				796 mg/kg					
				bw/d				bw/d					
ETHYL ACETATE Threshold Limit Value													
Туре	Country	TWA/8h		STEL/15min		Remarks							
		mg/m3	ppm	mg/m3	ppm	Observat	10115						
VLA	ESP	734	200	1468	400								
VLEP	FRA	1400	400										
WEL	GBR	734	200	1468	400								
VLEP	ITA	734	200	1468	400								
TLV	NOR	734	200										
VLE	PRT	734	200	1468	400								
OEL	EU	734	200	1468	400								
TLV-ACGIH		1441	400										
Predicted no-effect concentrati	on - PNFC												
Normal value in fresh water	11160			0,24	mg	//							
Normal value in marine water				0,24	mg								
	odimont												
Normal value for fresh water se				1,15	mg								
Normal value for marine water				0,115	mg								
Normal value of STP microorga		. ,		650	mg								
Normal value for the food chair	0,2	mg											
Normal value for the terrestrial	<u> </u>			0,148	mg	/kg							
Health - Derived no-effec	t level - DNEL / D Effects on consumers	MEL			Effects on workers								
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic					
Oral				4,5 mg/kg		Systemic		Systemic					
Inhalation	734 mg/m3	734 mg/m3	367 mg/m3	367 mg/m3	1468 mg/m3	1468 mg/m3	734 mg/m3	734 mg/m3					

#### Revision nr. 2 Meccanocar Italia S.r.l. Dated 16/07/2020 Printed on 16/07/2020 **RUST CONVERTER** Page n. 8/31 Replaced revision:1 (Dated: 14/02/2020) 63 mg/kg 37 mg/kg Skin bw/d bw/d PHOSPHORIC ACID Threshold Limit Value TWA/8h STEL/15min Туре Country Remarks / Observations mg/m3 ppm mg/m3 ppm VLA ESP 2 VLEP FRA 1 0,2 2 0,5 WEL GBR 1 2 VLEP ITA 2 1 NOR TLV 1 VLE PRT 1 2 OEL EU 1 2 TLV-ACGIH 3 Health - Derived no-effect level - DNEL / DMEL Effects on Effects on workers consumers Route of exposure Chronic local Chronic Acute Chronic local Chronic Acute local Acute systemic Acute local systemic systemic systemic Oral 0,1 mg/kg bw/d Inhalation 10,7 mg/m3 0,36 mg/m3 4,57 mg/m3 2 mg/m3 1 mg/m3 ZINC OXIDE **Threshold Limit Value** Country TWA/8h STEL/15min Remarks / Туре Observations mg/m3 ppm mg/m3 ppm VLA ESP 2 10 VLEP FRA 5 TLV NOR 5 TLV-ACGIH 2 10 Predicted no-effect concentration - PNEC Normal value in fresh water 2.6 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 Effects on Effects on consumers workers Route of exposure Acute systemic Chronic local Chronic Acute Chronic local Chronic Acute local Acute local systemic systemic systemic Oral 0,83 mg/kg bw/d 2,5 mg/m3 0,5 mg/m3 Inhalation 5 mg/m3 Skin 83 mg/kg 83 mg/kg bw/d bw/d **NITRIC ACID Threshold Limit Value**

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Туре	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
VLA	ESP			2,6	1	
VLEP	FRA			2,6	1	
WEL	GBR			2,6	1	
VLEP	ITA			2,6	1	
TLV	NOR	5	2			
VLE	PRT			2,6	1	
OEL	EU			2,6	1	
TLV-ACGIH		5,2	2	10,3	4	

Health - Derived no-effect level - DNEL / DMEL										
	Effects on				Effects on					
	consumers				workers					
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic	Acute local	Acute	Chronic local	Chronic		
				systemic		systemic		systemic		
Inhalation	1,3 mg/m3		1,3 mg/m3		2,6 mg/m3		2,6 mg/m3			

Legend:

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

VND = hazard identified but no DNEL/PNEC available ; NEA = no exposure expected ; NPI = no hazard identified.

## 8.2. Exposure controls

As the use of adequate technical equipment must always take priority over personal protective equipment, make sure that the workplace is well aired through effective local aspiration.

When choosing personal protective equipment, ask your chemical substance supplier for advice.

Personal protective equipment must be CE marked, showing that it complies with applicable standards.

Provide an emergency shower with face and eye wash station.

## HAND PROTECTION

Protect hands with category III work gloves (see standard EN 374).

The following should be considered when choosing work glove material: compatibility, degradation, failure time and permeability.

The work gloves' resistance to chemical agents should be checked before use, as it can be unpredictable. The gloves' wear time depends on the duration and type of use.

#### SKIN PROTECTION

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

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

#### EYE PROTECTION

Wear airtight protective goggles (see standard EN 166).

#### RESPIRATORY PROTECTION

If the threshold value (e.g. TLV-TWA) is exceeded for the substance or one of the substances present in the product, 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). 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

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open-circuit compressed air breathing apparatus (in compliance with standard EN 137) or external air-intake breathing apparatus (in compliance with standard EN 138). For a correct choice of respiratory protection device, see standard EN 529.

#### **ENVIRONMENTAL EXPOSURE CONTROLS**

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

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

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.

#### 2-METHOXY-1-METHYLETHYL ACETATE

Use gloves chemically resistant to this material in case of prolonged or frequent repeated contact. Use chemical resistant gloves classified according to EN374: protective gloves against chemicals and microorganisms. Examples of preferred barrier material for gloves include: Butyl rubber. Polyethylene. Chlorinated polyethylene. Ethyl vinyl alcohol laminate ("EVAL"). Examples of acceptable barrier materials for gloves include: Natural rubber ("latex"). Polyvinyl chloride ("PVC" or "vinyl"). Nitrile / butadiene rubber ("nitrile" or "NBR"). In the event of prolonged or frequently repeated contact, a glove with a protection class of 5 or higher is recommended (breakthrough time greater than 240 minutes according to EN 374). When only brief contact is expected, a glove with a protection class of 1 or more is recommended (breakthrough time greater than 10 minutes according to EN 374)

ETHYL ACETATE

Butyl rubber gloves (opening times> 480 minutes), Neoprene ™ rubber, nitrile rubber (opening times up to 480 minutes).

PHOSPHORIC ACID

Wear suitable gloves (neoprene gloves)

ZINC OXIDE

Protective gloves (EN 374)

NITRIC ACID

Respiratory protection: respiratory protection is necessary for normal handling with highly concentrated nitric acid (except for closed systems). Masks with an assigned protection factor (APF) = 20 are generally recommended as indicated in the BS EN 529: 2005 standard. For exposure masks for short periods, we recommend EN149 type FF P3, EN 14387 type B or type E model P3, EN 1827 class FMP3 (non-exhaustive list). For longer periods of exposure, full masks or masks with a device that supplies fresh air are recommended - Full face mask EN 143, EN 14387, EN 12083 class P3 or class XP3, EN12941 class TH3, EN 12942 TM3, EN14593 or EN138. (Non-exhaustive list).

Hand protection: in case of skin contact, use waterproof chemical resistant gloves conforming to EN 374 (required): material: butyl rubber, PVC, fluorine elastomer PTFE.

Eye protection: if splashes, chemical protective goggles are likely to occur, e.g. EN 166 or EN 402 full face mask (required).

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If splashes are likely to occur, wear acid-resistant protective clothing and rubber boots (required).

## **SECTION 9. Physical and chemical properties**

## 9.1. Information on basic physical and chemical properties

Appearance liquid
Colour beige

Odour characteristic
Odour threshold Not available

pH 3
Melting point / freezing point < -5 °C
Initial boiling point Not available
Boiling range Not available
Flash point 58 °C

Not available Evaporation rate Flammability (solid, gas) Not available Not available Lower inflammability limit Upper inflammability limit Not available Not available Lower explosive limit Upper explosive limit Not available Vapour pressure Not available Vapour density Not available 0,987 Relative density

Solubility partially soluble in water

Partition coefficient: n-octanol/water Not available

Auto-ignition temperature > 270 °C

Decomposition temperature Not available

Viscosity 38"

Explosive properties Not available
Oxidising properties Not available

## 9.2. Other information

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.

#### 

#### ETHYL ACETATE

It slowly decomposes to acetic acid and ethanol due to the action of light, air and water. Stable under normal conditions. Upon storage, it is slowly decomposed by water.

#### PHOSPHORIC ACID

Decomposes at temperatures above 200°C/392°F.

NITRIC ACID

Decomposes at 84°C/183°F.Possibility of self-ignition.

#### 10.2. Chemical stability

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

NITRIC ACID

Thermally stable in terms of reaction under normal storage conditions.

## 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.

PROPAN-2-OL

Vapors can form an explosive mixture with air.

## 2-METHOXY-1-METHYLETHYL ACETATE

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

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.

PHOSPHORIC ACID

Risk of explosion on contact with: nitromethane.May react dangerously with: alkalis, sodium borohydride.

Exothermic reaction with water.

Reacts violently with strong alkalis.

In contact with reactive metals (such as steel, carbon and aluminum) it can produce hydrogen.

# Revision nr. 2 Meccanocar Italia S.r.l. Dated 16/07/2020 Printed on 16/07/2020 **RUST CONVERTER** Page n. 13/31 Replaced revision:1 (Dated: 14/02/2020) High temperature formation of phosphorus oxides. 10.4. Conditions to avoid Avoid overheating. Avoid bunching of electrostatic charges. Avoid all sources of ignition. 2-METHOXY-1-METHYLETHYL ACETATE The product can oxidize at high temperatures. Avoid static discharge. Flammable vapors can be released at high temperatures ETHYL ACETATE Avoid exposure to: light, sources of heat, naked flames. Ignition sources. NITRIC ACID Avoid exposure to: heat, light. Direct heat, high temperature to avoid the release of nitric acid fumes and damage to the container. The reaction with the most common metals releases hydrogen Exothermic reaction with water. 10.5. Incompatible materials 2-METHOXY-1-METHYLETHYL ACETATE Incompatible with: oxidising substances, strong acids, alkaline metals. Avoid contact with oxidizing materials. Avoid contact with: strong acids. Strong oxidants. ETHYL ACETATE Incompatible with: acids,bases,strong oxidants,aluminium,nitrates,chlorosulphuric acid.Incompatible materials: Oxidizing agents, acids, alkalis.

PHOSPHORIC ACID

ZINC OXIDE

Acids and basics.

Incompatible with: metals, strong alkalis, aldehydes, organic sulphides, peroxides.

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#### NITRIC ACID

Incompatible with: flammable substances, reducing substances, alcohol, metals, basic substances, acetone, acetic acid, acetic anhydride. Incompatible materials: plastic materials.

Combustible materials, organic matter, reducing agents, alkalis, metal powders, hydrogen sulphide, alcohols, chlorates and carbides, carbon steel, monel, copper, many other metals and alloys, flammable liquids and chromic acid.

It can react violently with reducing agents, strong bases, organic materials, chlorides and eventually divided metals.

It is corrosive to concrete.

## 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.

ETHYL ACETATE

Carbon oxides on combustion.

PHOSPHORIC ACID

May develop: phosphoryl oxides.

ZINC OXIDE

ZnO fumes can be generated during heat treatment.

NITRIC ACID

May develop: nitric oxide.

When heated, nitric acid and NOx vapors can evolve.

## **SECTION 11. Toxicological information**

## 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.

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2-METHOXY-1-METHYLETHYL 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).

#### 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.

## **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

Corrosive to the respiratory tract.

PROPAN-2-OL

LD50 (Oral) 4710 mg/kg Rat

LD50 (Dermal) 12800 mg/kg Rat

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

NITRIC ACID

LC50 (Inhalation) 67 ppm/4h Rat

2-METHOXY-1-METHYLETHYL ACETATE

LD50 (Oral) 8530 mg/kg Rat

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LD50 (Dermal) > 5000 mg/kg Rat

## XYLENE (MIXTURE OF ISOMERS)

Method: Equivalent or similar to EU Method B.1

Reliability: 1

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

Route of exposure: Oral

Results: LD50 = 3523 mg / kg bw

Method: Equivalent or similar to EU Method B.2

Reliability: 2 Species: Rat (male)

Route of exposure: Inhalation (vapors)

Results: LD50 = 6700 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)

## ETHYL ACETATE

Method: Multi-Substance Rule for the Testing of Neurotoxicity 40 CFR Part 799 (58 FR 40262)

Reliability: 1

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

Route of exposure: Inhalation (vapors)

Results: Negative Method: Not indicated

Reliability: 2

Species: Rabbit (New Zealand White; male)

Route of exposure: Dermal Results: LD50> 20 000 mg / kg bw

#### 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)

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Route of exposure: Inhalation Results: LC50> 5 700 mg / m³ air

Method: OECD 402 Reliability: 1

Species: Rat (Wistar; male / female) Route of exposure: Dermal Results: LD50> 2 000 mg / kg bw

## NITRIC ACID

Method: OECD 403 Reliability: 1

Species: Rat (Wistar; male / female) Route of exposure: Inhalation Results: LC50> 2.65 mg / L air

## SKIN CORROSION / IRRITATION

Causes skin irritation

#### 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)

## 2-METHOXY-1-METHYLETHYL ACETATE

Method: Equivalent or similar from OECD 404

Reliability: 2

Species: Rabbit (New Zealand White)

Route of exposure: Dermal Results: Not irritating

## 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 irritation

## PROPAN-2-OL

Method: Equivalent or similar to OECD 405

Reliability: 1

Species: Rabbit (New Zealand White)

Route of exposure: Ocular Results: Category 2

## 2-METHOXY-1-METHYLETHYL ACETATE

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Method: Equivalent or similar from OECD 405

Reliability: 2 Species: Rabbit (New Zealand White)

Route of exposure: Ocular Results: Not irritating

## ETHYL ACETATE

Method: OECD 405 Reliability: 2

Species: Rabbit (New Zealand White)

Route of exposure: Ocular Results: Not irritating

## 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

Does not meet the classification criteria for this hazard class

#### PROPAN-2-OL

Method: OECD 406

Reliability: 1

Species: guinea pig (Hartley; male / female) Route of exposure: Dermal

Results: Not sensitizing

Skin sensitization

2-METHOXY-1-METHYLETHYL ACETATE

Method: Equivalent or similar from OECD 406

Reliability: 2

Species: guinea pig (Dunkin-Hartley; male / female)

Route of exposure: Dermal Results: Not sensitizing

## ETHYL ACETATE

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 Results: Not sensitizing

## GERM CELL MUTAGENICITY

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Does not meet the classification criteria for this hazard class

## XYLENE (MIXTURE OF ISOMERS)

Method: Equivalent or similar to EU Method B.10-in vitro test

Reliability: 2

Species: Chinese hamster

Results: Negative with and without metabolic activation

Method: Equivalent or similar to OECD 478

Reliability: 2

Species: Mouse (Swiss Webster; male / female)

Route of exposure: Dermal

Results: Negative

## 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

#### 2-METHOXY-1-METHYLETHYL ACETATE

Method: Equivalent or similar from OECD 471-in vitro test

Reliability: 1

Species: Salmonella typhimurium

Results: Negative

## ETHYL ACETATE

Method: Equivalent or similar to OECD 471 in vitro test

Reliability: 2 Species: S. typhimurium

Results: Negative with and without metabolic activation Method: Equivalent or similar to OECD 474 in vivo test

Reliability: 2

Species: Chinese hamster (male / female)

Route of exposure: Oral Results: Negative

#### PHOSPHORIC ACID

Method: OECD 471 in vitro test

Reliability: 1

Species: S. typhimurium, E. Coli

Results: Negative with and without metabolic activation

## 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

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Reliability: 1

Species: Mouse (NMRI; male)
Route of exposure: intraperitoneal

Results: Negative

## CARCINOGENICITY

Does not meet the classification criteria for this hazard class

#### 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".

## 2-METHOXY-1-METHYLETHYL ACETATE

Method: OECD Guideline 453

Reliability: 1

Species: Rat (Fischer 344; male / female) Route of exposure: Inhalation (vapors)

Results: NOEL 300 ppm

## 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

#### 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

## ETHYL ACETATE

Method: Equivalent or similar to OECD 416

Reliability: 1

Species: Mouse (CD-1; male / female)

Route of exposure: Oral Results: Negative

Method: Equivalent or similar to OECD 414

Reliability: 2

Species: Rat (Sprague-Dawley) Route of exposure: Inhalation

Results: Negative

Adverse effects on sexual function and fertility

XYLENE (MIXTURE OF ISOMERS)

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Method: Not indicated

Reliability: 2

Species: Rat (Crl-CD® (SC) BR; male / female) Route of exposure: Inhalation (vapors) Results: Negative, NOAEC (fertility) = 500 ppm

## 2-METHOXY-1-METHYLETHYL ACETATE

Method: OECD Guideline 416

Reliability: 1

Species: Rat (Sprague-Dawley; male / female)
Route of exposure: Inhalation (vapors)

Results: NOAEL 300 ppm

#### PHOSPHORIC ACID

Method: OECD Combined Repeated Dose and Reproductive / Developmental Toxicity Screening Test

Reliability: 1

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

Route of exposure: Oral

Results: Negative, NOAEL (fertility)> = 500 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

## NITRIC ACID

Method: OECD 422

Reliability: 2

Species: Rat (Wistar; male / female)

Route of exposure: Oral

Results: NOAEL (fertility)> = 1500 mg / kg bw / day

Adverse effects on development of the offspring

XYLENE (MIXTURE OF ISOMERS)

Method: Equivalent or similar to OECD 414

Reliability: 2

Species: Rat (Sprague-Dawley)
Route of exposure: Inhalation (vapors)
Results: Negative (development)

## 2-METHOXY-1-METHYLETHYL ACETATE

Method: Equivalent or similar from OECD 414

Reliability: 1

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

#### PHOSPHORIC ACID

Method: Equivalent or similar to OECD 414

Reliability: 2

Species: Mouse (CD-1)

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Route of exposure: Oral

Results: Negative, NOAEL (development)> = 370 mg / kg bw / day

#### ZINC OXIDE

Method: OECD 414 Reliability: 1

Species: Rat (Wistar)

Route of exposure: Inhalation (aerosol) Results: NOAEC (development) 7.5 mg/m³ air

## NITRIC ACID

Method: OECD 422 Reliability: 2

Species: Rat (Sprague-Dawley) Route of exposure: Oral

Results: NOAEL (development)> = 1500 mg / kg bw / day

#### STOT - SINGLE EXPOSURE

May cause drowsiness or dizziness

## XYLENE (MIXTURE OF ISOMERS)

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 through expert judgment, the substance is classified in the target organ toxicity class for single exposure.

#### 2-METHOXY-1-METHYLETHYL ACETATE

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

## ETHYL ACETATE

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

#### PHOSPHORIC ACID

Based on available data and through expert judgment, the substance is not 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.

#### NITRIC ACID

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

2-METHOXY-1-METHYLETHYL ACETATE

Central nervous system

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#### ETHYL ACETATE

Central nervous system

Route of exposure PROPAN-2-OL

Inhalation

2-METHOXY-1-METHYLETHYL ACETATE

Oral

ETHYL ACETATE

Inhalation

## STOT - REPEATED EXPOSURE

Does not meet the classification criteria for this hazard class

## XYLENE (MIXTURE OF ISOMERS)

Method: Equivalent or similar to OECD 408

Reliability: 2

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

Route of exposure: Oral Results: Negative

## PROPAN-2-OL

Method: OECD 451

Reliability: 1

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

2-METHOXY-1-METHYLETHYL ACETATE

Method: OECD Guideline 422

Reliability: 2

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

Route of exposure: Oral

Results: NOAEL 1000 mg / kg / day Method: OECD Guideline 453

Reliability: 1
Species: Rat (Fischer 344; male / female) Route of exposure: Inhalation (vapors)

Results: NOEL 300 ppm

Method: Equivalent or similar from OECD 410

Reliability: 1

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

Route of exposure: Dermal

Results: NOAEL> 1 000 mg / kg bw / day

#### ETHYL ACETATE

Method: Equivalent or similar to EPA OTS 795.2600

Reliability: 2

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

Route of exposure: Oral

Results: NOAEL 900 mg / kg bw / day

Method: EPA OTS 798.2450

Reliability: 1

Species: Rat (Crl: CD®BR; male / female)

Route of exposure: Inhalation Results: LOEC 350 ppm

PHOSPHORIC ACID

Method: Not indicated

Reliability: 2 Species: Rat

Route of exposure: Oral Results: Negative

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 / m³ air

Method: OECD 410 Reliability: 2

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

Route of exposure: Dermal

Results: LOAEL 75 mg / kg bw / day

NITRIC ACID

Method: OECD 422 Reliability: 2

Species: Rat (Wistar; male / female)

Route of exposure: Oral

Results: NOAEL = 1500 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

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

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Chronic NOEC for Fish 0,53 mg/l

Chronic NOEC for Algae / Aquatic Plants 0,024 mg/l

PHOSPHORIC ACID

EC50 - for Crustacea 100 mg/l/48h
EC50 - for Algae / Aquatic Plants 100 mg/l/72h
EC10 for Algae / Aquatic Plants 100 mg/l/72h
Chronic NOEC for Algae / Aquatic Plants 100 mg/l

XYLENE (MIXTURE OF ISOMERS)

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

XYLENE (MIXTURE OF ISOMERS)
Rapidly degradable in water, 98% in 28 days
PROPAN-2-OL
Quickly degradable in water.
2-METHOXY-1-METHYLETHYL ACETATE
Rapidly biodegradable, from 70.5% to 93.4% in 45 days.
ETHYL ACETATE
Rapidly degradable, 60% in 10 days.

ZINC OXIDE

Solubility in water 2,9 mg/l

NOT rapidly degradable

ETHYL ACETATE

Solubility in water > 10000 mg/l

Rapidly degradable

PROPAN-2-OL Rapidly degradable

NITRIC ACID

Solubility in water > 1000000 mg/l

Degradability: information not available

PHOSPHORIC ACID

Solubility in water > 850000 mg/l

Degradability: information not available

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XYLENE (MIXTURE OF ISOMERS)

Solubility in water 100 - 1000 mg/l

Degradability: information not available

2-METHOXY-1-METHYLETHYL ACETATE

Solubility in water > 10000 mg/l

Rapidly degradable

12.3. Bioaccumulative potential

ZINC OXIDE

BCF > 175

ETHYL ACETATE

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

PROPAN-2-OL

Partition coefficient: n-octanol/water 0,05

NITRIC ACID

Partition coefficient: n-octanol/water < 3

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

12.4. Mobility in soil

XYLENE (MIXTURE OF ISOMERS)

Partition coefficient: soil/water 2,73

12.5. Results of PBT and vPvB assessment

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

12.6. Other adverse effects

Information not available

## **SECTION 13. Disposal considerations**

## 13.1. Waste treatment methods

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Reuse, when possible. Product residues should be considered special hazardous waste. The hazard level of waste containing this product should be evaluated according to applicable regulations.

Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations.

Waste transportation may be subject to ADR restrictions.

CONTAMINATED PACKAGING

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

#### 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.

## 2-METHOXY-1-METHYLETHYL ACETATE

This product, when disposed of in its unused and uncontaminated state, must be treated as hazardous waste according to EC Directive 91/689 / EEC. Disposal practices must comply with all national and provincial laws and local or local laws governing hazardous waste. Further evaluation may be required for used, contaminated and residual materials. Do not discharge into sewers, onto the ground or into any body of water.

#### ETHYL ACETATE

Dispose of as hazardous waste. Recover or recycle if possible. Otherwise incineration. Dispose according to local regulations.

Disposal of the container: empty the container completely. Empty containers may contain highly flammable residues. Do not cut, grind, puncture, weld or dispose of containers unless adequate precautions have been taken against this hazard. Do not remove the container labels until they are cleaned. Send to drum recovery or metal recovery.

#### PHOSPHORIC ACID

The neutralized liquid can be poured in compliance with the normative legislation (the law regulates the emptying of waste water containing phosphorus).

The waste from the containers or the used container itself must be disposed of in accordance with local requirements.

Sodium carbonate, calcium carbonate and slaked lime (calcium hydroxide) can be used as neutralizing agents for the material which cannot be eliminated.

If phosphoric acid is used in the reactions of aqueous solutions, rinse the drum three times with water.

Respect local regulations for disposal.

#### 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.

## NITRIC ACID

Neutralize carefully with lime or carbonates.

Dispose of in accordance with relevant local regulations.

## **SECTION 14. Transport information**

## 14.1. UN number

ADR / RID, IMDG, 1993

IATA:

## 14.2. UN proper shipping name

ADR / RID: FLAMMABLE LIQUID, N.O.S.

IMDG: FLAMMABLE LIQUID, N.O.S.

IATA: FLAMMABLE LIQUID, N.O.S.

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

ADR / RID: Class: 3 Label: 3



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IMDG: Class: 3 Label: 3

IATA: Class: 3 Label: 3



## 14.4. Packing group

ADR / RID, IMDG,

Ш

IATA:

#### 14.5. Environmental hazards

ADR / RID: NO
IMDG: NO
IATA: NO

## 14.6. Special precautions for user

ADR / RID: HIN - Kemler: 33 Limited Tunnel Quantities: 1 restriction

L code: (D/E)

Special Provision: 640D

IMDG: EMS: F-E, <u>S-E</u> Limited

Cargo:

Pass.:

Quantities: 1

Quantities

Maximum

quantity: 60 L instructions:

364 Maximum Packaging

Packaging

quantity: 5 L instructions:

Special Instructions: A3

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

Information not relevant

IATA:

## **SECTION 15. Regulatory information**

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

Seveso Category - Directive 2012/18/EC: P5c

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

Product Point

Point 3 - 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%.

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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:

Flam. Liq. 2 Flammable liquid, category 2
Flam. Liq. 3 Flammable liquid, category 3
Ox. Liq. 2 Oxidising liquid, category 2

Met. Corr. 1 Substance or mixture corrosive to metals, category 1

Acute Tox. 3

Acute toxicity, category 3

Acute Tox. 4

Skin Corr. 1A

Skin corrosion, category 1A

Skin Corr. 1B

Skin corrosion, category 1B

Eye Irrit. 2

Skin Irrit. 2

Skin irritation, category 2

STOT SE 3 Specific target organ toxicity - single exposure, category 3

Aquatic Chronic 1 Hazardous to the aquatic environment, chronic toxicity, category 1

Aquatic Chronic 3 Hazardous to the aquatic environment, chronic toxicity, category 3

H225 Highly flammable liquid and vapour.
H226 Flammable liquid and vapour.
H272 May intensify fire; oxidiser.
H290 May be corrosive to metals.

H331 Toxic if inhaled.
H302 Harmful if swallowed.

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H312 Harmful in contact with skin.

H332 Harmful if inhaled.

H314 Causes severe skin burns and eye damage.

H319 Causes serious eye irritation.

H315 Causes skin irritation.

H336 May cause drowsiness or dizziness.

H410 Very toxic to aquatic life with long lasting effects. H412 Harmful to aquatic life with long lasting effects.

**EUH066** Repeated exposure may cause skin dryness or cracking.

EUH071 Corrosive to the respiratory tract.

#### LEGEND:

- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- CAS NUMBER: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE NUMBER: Identifier in ESIS (European archive of existing substances)
- CLP: EC Regulation 1272/2008
- DNEL: Derived No Effect Level
- EmS: Emergency Schedule
- GHS: Globally Harmonized System of classification and labeling of chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulation
- IC50: Immobilization Concentration 50%
- IMDG: International Maritime Code for dangerous goods
- IMO: International Maritime Organization
- INDEX NUMBER: Identifier in Annex VI of CLP
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PBT: Persistent bioaccumulative and toxic as REACH Regulation
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PNEC: Predicted no effect concentration
- REACH: EC Regulation 1907/2006
- RID: Regulation concerning the international transport of dangerous goods by train
- TLV: Threshold Limit Value
- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TWA STEL: Short-term exposure limit
- TWA: Time-weighted average exposure limit
- VOC: Volatile organic Compounds
- vPvB: Very Persistent and very Bioaccumulative as for REACH Regulation
- WGK: Water hazard classes (German).

## GENERAL BIBLIOGRAPHY

- 1. Regulation (EC) 1907/2006 (REACH) of the European Parliament
- Regulation (EC) 1272/2008 (CLP) of the European Parliament
   Regulation (EU) 790/2009 (I Atp. CLP) of the European Parliament
- 4. Regulation (EU) 2015/830 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) 2018/1480 (XIII Atp. CLP)
- 16. Regulation (EU) 2019/521 (XII Atp. CLP) The Merck Index. 10th Edition

# Revision nr. 2 Meccanocar Italia S.r.l. Dated 16/07/2020 Printed on 16/07/2020 **RUST CONVERTER** Page n. 31/31 Replaced revision:1 (Dated: 14/02/2020) 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. 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: 02 / 03 / 04 / 05 / 07 / 08 / 09 / 10 / 11 / 12 / 13 / 16.