

# 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 16530-4080**  
Product name: **FAIRING DETERGENT**

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

Intended use: **Spray cleaner for hard surfaces**

### 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.
Eye irritation, category 2	H319	Causes serious eye irritation.

### 2.2. Label elements

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

Hazard pictograms:



Signal words:

Danger

Hazard statements:

**H222** Extremely flammable aerosol.  
**H229** Pressurised container: may burst if heated.  
**H319** Causes serious eye irritation.

Precautionary statements:

**P210** Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
**P251** Do not pierce or burn, even after use.  
**P410+P412** Protect from sunlight. Do not expose to temperatures exceeding 50°C / 122°F.  
**P211** Do not spray on an open flame or other ignition source.

**Contains:** PROPAN-2-OL  
 1-METHOXY-2-PROPANOL

### 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)
<b>PROPAN-2-OL</b>		
CAS 67-63-0	$22,5 \leq x < 24$	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>BUTANE</b>		
CAS 106-97-8	$8 \leq x < 9$	Flam. Gas 1A H220, Press. Gas (Liq.) H280, Classification note according to Annex VI to the CLP Regulation: C U
EC 203-448-7		
INDEX 601-004-00-0		
Reg. no. 01-2119474691-32-XXXX		
<b>PROPANE</b>		
CAS 74-98-6	$8 \leq x < 9$	Flam. Gas 1A H220, Press. Gas (Liq.) H280, Classification note according to Annex VI to the CLP Regulation: U
EC 200-827-9		

INDEX 601-003-00-5

Reg. no. 01-2119486944-21-XXXX

**1-METHOXY-2-PROPANOL**

CAS 107-98-2

$8 \leq x < 9$

Flam. Liq. 3 H226, STOT SE 3 H336

EC 203-539-1

INDEX 603-064-00-3

Reg. no. 01-2119457435-35-XXXX

**ISOBUTANE**

CAS 75-28-5

$8 \leq x < 9$

Flam. Gas 1A H220, Press. Gas H280

EC 200-857-2

INDEX 601-004-00-0

Reg. no. 01-2119485395-27-XXXX

**SODIUM NITRITE**

CAS 7632-00-0

$2 \leq x < 2,5$

Ox. Sol. 2 H272, Acute Tox. 3 H301, Eye Irrit. 2 H319, Aquatic Acute 1 H400  
M=1

EC 231-555-9

INDEX 007-010-00-4

Reg. no. 01-2119471836-27-XXXX

**ETHANOL**

CAS 64-17-5

$2 \leq x < 2,5$

Flam. Liq. 2 H225, Eye Irrit. 2 H319

EC 200-578-6

INDEX 603-002-00-5

Reg. no. 01-2119457610-43-XXXX

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: 24,00 %

## 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. Get medical advice/attention immediately. Wash contaminated clothing before using it again.

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

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

### 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.

**FAIRING DETERGENT****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 2004/37/EC; Directive 2000/39/EC; Directive 91/322/EEC.
	TLV-ACGIH	ACGIH 2019

**PROPAN-2-OL****Threshold Limit Value**

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
VLA	ESP	500	200	1000	400	
VLEP	FRA			980	400	
WEL	GBR	999	400	1250	500	
TLV	NOR	245	100			
TLV-ACGIH		492	200	983	400	

**Predicted no-effect concentration - PNEC**

Normal value in fresh water		140,9	mg/l
Normal value in marine water		140,9	mg/l
Normal value for fresh water sediment		552	mg/kg
Normal value for marine water sediment		552	mg/kg
Normal value of STP microorganisms		2251	mg/l
Normal value for the food chain (secondary poisoning)		160	mg/kg
Normal value for the terrestrial compartment		28	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				26 mg/kg bw/d				
Inhalation				89 mg/m3				500 mg/m3
Skin				319 mg/kg bw/d				888 mg/kg bw/d

## FAIRING DETERGENT

**1-METHOXY-2-PROPANOL****Threshold Limit Value**

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
VLA	ESP	375	100	568	150	SKIN
VLEP	FRA	188	50	375	10	SKIN
WEL	GBR	375	100	560	150	SKIN
VLEP	ITA	375	100	568	150	SKIN
TLV	NOR	180	50			SKIN
VLE	PRT	375	100	568	150	
OEL	EU	375	100	568	150	SKIN
TLV-ACGIH		184	50	368	100	

**Predicted no-effect concentration - PNEC**

Normal value in fresh water		10		mg/l
Normal value in marine water		1		mg/l
Normal value for fresh water sediment		52,3		mg/kg
Normal value for marine water sediment		5,2		mg/kg
Normal value of STP microorganisms		100		mg/l
Normal value for the terrestrial compartment		4,59		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				33 mg/kg bw/d				
Inhalation				78 mg/m3	553,5 mg/m3	553,5 mg/m3		369 mg/m3
Skin				43,9 mg/kg bw/d				183 mg/kg bw/d

**PROPANE****Threshold Limit Value**

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
VLA	ESP		1000			
TLV	NOR	900	500			
TLV-ACGIH			1000			

**BUTANE****Threshold Limit Value**

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
VLA	ESP		1000			Gases
VLEP	FRA	1900	800			
WEL	GBR	1450	600	1810	750	
TLV	NOR	600	250			
TLV-ACGIH					1000	

**FAIRING DETERGENT****ETHANOL****Threshold Limit Value**

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
VLA	ESP			1910	1000	
VLEP	FRA	1900	1000	9500	5000	
WEL	GBR	1920	1000			
TLV	NOR	950	500			
TLV-ACGIH				1884	1000	
<b>Predicted no-effect concentration - PNEC</b>						
Normal value in fresh water				0,96	mg/l	
Normal value in marine water				0,79	mg/l	
Normal value for fresh water sediment				3,6	mg/kg	
Normal value for marine water sediment				2,9	mg/kg	
Normal value of STP microorganisms				580	mg/l	
Normal value for the food chain (secondary poisoning)				0,38	mg/kg	
Normal value for the terrestrial compartment				0,63	mg/kg	

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

Route of exposure	Effects on consumers			Chronic systemic	Effects on workers			
	Acute local	Acute systemic	Chronic local		Acute local	Acute systemic	Chronic local	Chronic systemic
Oral				87 mg/kg bw/d				
Inhalation				114 mg/m3				950 mg/m3
Skin				206 mg/kg bw/d				343 mg/kg bw/d

**SODIUM NITRITE****Predicted no-effect concentration - PNEC**

Normal value in fresh water				0,005	mg/l	
Normal value in marine water				0,006	mg/l	
Normal value for fresh water sediment				0,019	mg/kg	
Normal value for marine water sediment				0,022	mg/kg	
Normal value of STP microorganisms				21	mg/l	
Normal value for the terrestrial compartment				0,001	mg/kg	

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

Route of exposure	Effects on consumers			Chronic systemic	Effects on workers			
	Acute local	Acute systemic	Chronic local		Acute local	Acute systemic	Chronic local	Chronic systemic
Inhalation							2 mg/m3	2 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**

None required.

**SKIN PROTECTION**

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

**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.

**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.

**ISOBUTANE**

Suitable glove material protective gloves, e.g. nitrile butadiene rubber gloves (NBR), leather gloves, heat insulating

Selection of protective gloves to meet specific workplace requirements.

Suitability for specific workplaces must be clarified with the manufacturers of protective gloves.

The information is based on our tests, references from literature and information from glove manufacturers or derived by analogy with similar materials.

Remember that the useful time per day of a chemical protection glove can be much shorter than the breakthrough time determined according to EN 374 due to the numerous influencing factors involved.

**1-METHOXY-2-PROPANOL**

Wear chemical resistant gloves classified according to EN374: protective gloves against chemicals and microorganisms. Examples of preferred barrier material for gloves include: butyl rubber. Laminate of ethyl and vinyl alcohol ("EVAL"). Examples of acceptable barrier materials for gloves include: Natural rubber ("latex"). Neoprene Nitrile / butadiene rubber ("nitrile" or "NBR"). Polyvinyl Chloride ("PVC" or "Vinyl"). Viton In case of prolonged or repeated frequent contact, a glove with a protection class of 5 or higher is recommended (penetration time greater than 240 minutes according to EN 374). When only a brief contact is expected, a glove with a protection class of 1 or more is recommended (penetration time greater than 10 minutes according to EN 374). NOTICE: the selection of a specific glove for a particular application and the duration of use in a work environment must also take into account all relevant factors in the workplace, such as, among others: Other chemicals that can be handled, physical requirements (protection against cuts / punctures, dexterity, thermal protection), possible bodily reactions to glove materials, as well as instructions / specifications provided by the glove supplier.



## SODIUM NITRITE

Chemical resistant protective gloves (EN 374)

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

polyvinyl chloride (PVC) - coating thickness 0.7 mm

nitrile rubber (NBR) - coating thickness of 0.4 mm

chloroprene rubber (CR) - coating thickness 0.5 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.

The manufacturer's instructions for use must be observed due to the wide variety of types.

## SECTION 9. Physical and chemical properties

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

Appearance	liquid
Colour	transparent
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	< 0 °C
Evaporation rate	Not available
Flammability (solid, gas)	Not available
Lower inflammability limit	Not available
Upper inflammability limit	Not available
Lower explosive limit	Not available
Upper explosive limit	Not available
Vapour pressure	Not available
Vapour density	Not available
Relative density	0,875
Solubility	soluble in water
Partition coefficient: n-octanol/water	Not available
Auto-ignition temperature	Not available
Decomposition temperature	Not available
Viscosity	Not available
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.

#### 1-METHOXY-2-PROPANOL

Dissolves various plastic materials. Stable in normal conditions of use and storage.

Absorbs and dissolves in water and in organic solvents. With air it may slowly form explosive peroxides.

### 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.

#### PROPAN-2-OL

Vapors can form an explosive mixture with air.

#### ISOBUTANE

Vapors can form an explosive mixture with air.

#### 1-METHOXY-2-PROPANOL

May react dangerously with: strong oxidising agents, strong acids.

#### BUTANE

Vapors can form an explosive mixture with air.

#### ETHANOL

Risk of explosion on contact with: alkaline metals, alkaline oxides, calcium hypochlorite, sulphur monofluoride, acetic anhydride, acids, concentrated hydrogen peroxide, perchlorates, perchloric acid, perchloronitrile, mercury nitrate, nitric acid, silver, silver nitrate, ammonia, silver oxide, ammonia, strong oxidising agents, nitrogen dioxide. May react dangerously with: bromoacetylene, chlorine acetylene, bromine trifluoride, chromium trioxide, chromyl chloride, fluorine, potassium tert-butoxide, lithium hydride, phosphorus trioxide, black platinum, zirconium (IV) chloride, zirconium (IV) iodide. Forms explosive mixtures with: air.

#### SODIUM NITRITE

Dangerous reactions in the presence of the mentioned substances to be avoided.

### 10.4. Conditions to avoid

Avoid overheating.

**ISOBUTANE**

Keep away from heat and other causes of fire.

**1-METHOXY-2-PROPANOL**

Avoid exposure to: air.

Do not distill to dryness. The product can oxidize at high temperatures. The generation of gas during the decomposition can cause a searing in closed systems.

**BUTANE**

Avoid heat and sources of ignition.

**ETHANOL**

Avoid exposure to: sources of heat, naked flames.

High temperature. Proximity to sources of ignition

**SODIUM NITRITE**

Reducing agents, oxidizable substances, ammonium salts, amines, amino compounds, acids

**10.5. Incompatible materials**

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

**ISOBUTANE**

Strong oxidizing agents, chlorine, oxygen.

**1-METHOXY-2-PROPANOL**

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

Avoid the contact with: ácidos fuertes. Bases fuertes Oxidantes fuertes.

**BUTANE**

Strong oxidizing agents, chlorine, oxygen.

**ETHANOL**

Strong mineral acids, oxidizing agents. Aluminum at higher temperatures.

**10.6. Hazardous decomposition products****ISOBUTANE**

In case of fire or production of thermal decomposition, for example, carbon monoxide, carbon dioxide (CO<sub>2</sub>).

**1-METHOXY-2-PROPANOL**

The product of the composition depends on the temperature, the minister of air and the presence of other materials. The product of the composition can include and is not limited to: Aldehídos. Cetonas. Ácidos orgánicos

**BUTANE**

In case of fire or production of thermal decomposition, for example, carbon monoxide, carbon dioxide (CO<sub>2</sub>).

**ETHANOL**

Combustion will generate carbon oxides.

**SODIUM NITRITE**

Thermal decomposition:> 320 ° C  
nitrogen monoxide, nitrogen dioxide, disodium oxide

**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**1-METHOXY-2-PROPANOL**

WORKERS: inhalation; contact with the skin.

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

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

**1-METHOXY-2-PROPANOL**

The main route of entry is the skin, whereas the respiratory route is less important due to the low vapour pressure of the product. 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.

Interactive effects

Information not available

ACUTE TOXICITY

LC50 (Inhalation) of the mixture:  
Not classified (no significant component)  
LD50 (Oral) of the mixture:  
>2000 mg/kg  
LD50 (Dermal) of the mixture:  
Not classified (no significant component)

**PROPAN-2-OL**

LD50 (Oral) 4710 mg/kg Rat

LD50 (Dermal) 12800 mg/kg Rat

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

**ETHANOL**

LD50 (Oral) > 5000 mg/kg Rat

LC50 (Inhalation) 120 mg/l/4h Pimephales promelas

**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)

**1-METHOXY-2-PROPANOL**

Method: EU method B.1

Reliability: 1

Species: Rat (Fischer 344; male / female)

Route of exposure: oral

Results: LD50 = 3739 mg / kg bw

Method: equivalent or similar to the OECD 403

Reliability: 1

Species: Rat (Fischer 344; male / female)

Route of expositions: inhalation (vapors)

Results: Not classified

Method: equivalent or similar to the method B.3 of the EU

Reliability: 1

Species: Rat (Fischer 344; male / female)

Route of exposure: dermal

Results: LD50> 2000 mg / kg bw

**PROPANE**

Method: To study the concentrations at which the effects of the CNS occur following exposure by inhalation to propane by measuring LC50 (15 min) and EC50 (CNS) (10 min) in rats.

Reliability: 2

Species: Rat (Alderley Park (SPF); male / female)

Route of exposure: Inhalation

Results: LC50> 800 000 ppm

**BUTANE**

Method: Not indicated

Reliability: 2

Species: Rat (Alderley Park (SPF); male / female)

Route of exposure: Inhalation

Results: LC50: 1 443 mg / L air

**SKIN CORROSION / IRRITATION**

Does not meet the classification criteria for this hazard class

**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)

**1-METHOXY-2-PROPANOL**

Method: Equivalent or similar to EU Method B.4

Reliability: 1

Species: Rabbit (New Zealand White)

Route of exposure: Dermal

Results: Not irritating

**ETHANOL**

Method: OECD 404

Reliability: 1

**FAIRING DETERGENT**

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

## 1-METHOXY-2-PROPANOL

Method: Equivalent or similar to 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

## 1-METHOXY-2-PROPANOL

Method: Equivalent or similar to EU Method B.6  
Reliability: 1  
Species: guinea pig (male / female)  
Route of exposure: Dermal  
Results: Not sensitizing

GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

## 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

**FAIRING DETERGENT****1-METHOXY-2-PROPANOL**

Method: Equivalent or similar to OECD 471 in vitro test

Reliability: 1

Species: *S. typhimurium*

Results: Negative with and without metabolic activation

Method: Equivalent or similar to OECD 474 in vivo test

Reliability: 2

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

Route of exposure: Intraperitoneal

Results: Negative

**PROPANE**

Method: OECD 471 in vitro test

Reliability: 1

Species: Histidine Salmonella

Results: Negative with or without metabolic activation

Method: OECD 474-test in vivo

Reliability: 1

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

Route of exposure: Inhalation (gas)

Results: Negative

**BUTANE**

Method: OECD 471 in vitro test

Reliability: 1

Species: Salmonella strains, *S. typhimurium*

Results: Negative without metabolic activation

Method: OECD 474-test in vivo

Reliability: 1

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

Route of exposure: Inhalation (gas)

Results: Negative

**ETHANOL**

Method: Equivalent or similar to OECD 478 in vivo test

Reliability: 2

Species: Mouse (CFLP and Alderley Park; male)

Route of exposure: Oral

Results: Negative

**CARCINOGENICITY**

Does not meet the classification criteria for this hazard class

**1-METHOXY-2-PROPANOL**

Method: OECD 453

Reliability: 1

Species: Rat (Fischer 344; male / female)

Route of exposure: Inhalation (vapors)

Results: Negative

**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

**BUTANE**

Method: OECD 413

Reliability: 1

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

Route of exposure: Inhalation

Results: NOAEC 10000 ppm

Adverse effects on sexual function and fertility

1-METHOXY-2-PROPANOL

Method: OECD 416

Reliability: 1

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

Route of exposure: Inhalation (vapors)

Results: Negative, NOAEL (fertility) = 300 ppm

**PROPANE**

Method: OECD 413

Reliability: 1

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

Route of exposure: Inhalation

Results: NOAEC (fertility) 10 000 ppm

Adverse effects on development of the offspring

1-METHOXY-2-PROPANOL

Method: Equivalent or similar to OECD 414

Reliability: 1

Species: Rabbit (New Zealand White)

Route of exposure: Inhalation

Results: Negative, NOAEL (development) = 3000 ppm

**PROPANE**

Method: EPA OPPTS 870.3700

Reliability: 1

Species: Rat (VAF / Plus®, Sprague-Dawley Derived (CD®) CrI: CD® IGS BR)

Route of exposure: Inhalation (gas)

Results: NOAEC (development) 10 426 ppm

**ETHANOL**

Method: Not indicated

Reliability: 2

Species: Rat (Sprague-Dawley)

Route of exposure: Oral

Results: NOAEL (development) 5.2 g ethanol / kg bw / day

Bibliographic reference: Prenatal ethanol exposure has differential effects on fetal growth and skeletal ossification, Simpson ME, Duggal S, & Keiver K (2005)

STOT - SINGLE EXPOSURE

Does not meet the classification criteria for this hazard class

## PROPAN-2-OL

Based on the available data, the substance may cause damage to organs through single exposure and is therefore classified in this hazard class.

## ISOBUTANE

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

## 1-METHOXY-2-PROPANOL

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

## PROPANE

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

## BUTANE

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

## ETHANOL

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

## SODIUM NITRITE

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

Target organ

1-METHOXY-2-PROPANOL

Central nervous system

Route of exposure

PROPAN-2-OL

Inhalation

1-METHOXY-2-PROPANOL

Inhalation

STOT - REPEATED EXPOSURE

Does not meet the classification criteria for this hazard class

## PROPAN-2-OL

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

exposure.

#### 1-METHOXY-2-PROPANOL

Method: OECD 453

Reliability: 1

Species: Rat (Fischer 344; male / female)

Route of exposure: Inhalation (vapors)

Results: Negative, NOAEL = 300 ppm

Method: Equivalent or similar to OECD 410

Reliability: 1

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

Route of exposure: Dermal

Results: Negative, NOAEL > 1000 mg / kg bw / day

#### PROPANE

Method: OECD 422

Reliability: 1

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

Route of exposure: Inhalation (gas)

Results: NOAEC 16 000 ppm

#### BUTANE

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

#### ETHANOL

Method: Equivalent or similar to OECD 408

Reliability: 2

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

Route of exposure: Oral

Results: NOAEL 1 730 mg / kg bw / day

#### SODIUM NITRITE

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

#### ASPIRATION HAZARD

Does not meet the classification criteria for this hazard class

## SECTION 12. Ecological information

### 12.1. Toxicity

#### SODIUM NITRITE

LC50 - for Fish

0,79 mg/l/96h *Oncorhynchus mykiss*

EC50 - for Crustacea

23,31 mg/l/48h *Penaeus monodon*

EC50 - for Algae / Aquatic Plants

159 mg/l/72h *Tetrarseimis chui*

## FAIRING DETERGENT

## 1-METHOXY-2-PROPANOL

LC50 - for Fish 6812 mg/l/96h

EC50 - for Crustacea 23300 mg/l/48h

**12.2. Persistence and degradability**

## PROPAN-2-OL

Quickly degradable in water.

## 1-METHOXY-2-PROPANOL

Easily degradable in water, 4% in 28 days.

## BUTANE

Quickly degradable in water.

## ETHANOL

Quickly biodegradable, 60% in 5 days.

## BUTANE

Solubility in water 0,1 - 100 mg/l

Rapidly degradable

## PROPAN-2-OL

Rapidly degradable

## SODIUM NITRITE

Solubility in water 848000 mg/l

Degradability: information not available

## PROPANE

Solubility in water 0,1 - 100 mg/l

Rapidly degradable

## ETHANOL

Solubility in water 1000 - 10000 mg/l

Rapidly degradable

## 1-METHOXY-2-PROPANOL

Solubility in water 1000 - 10000 mg/l

Rapidly degradable

**12.3. Bioaccumulative potential**

## BUTANE

Partition coefficient: n-octanol/water 1,09

## PROPAN-2-OL

Partition coefficient: n-octanol/water 0,05

## SODIUM NITRITE

Partition coefficient: n-octanol/water -3,7

## PROPANE

Partition coefficient: n-octanol/water 1,09

## ETHANOL

Partition coefficient: n-octanol/water -0,35

## 1-METHOXY-2-PROPANOL

Partition coefficient: n-octanol/water < 1

**12.4. Mobility in soil**

Information not available

**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.

**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.

**ISOBUTANE**

Compliance with local regulations, e.g. incineration through flaring system.

No waste key number according to the European list of waste types can be assigned to this product, since this classification is based on the use (not yet determined) for which the product is intended for the consumer.

The key number for the waste must be determined according to the European waste type list (decision on the EU waste type list 2000/532 / EC) in collaboration with the disposal company / producer / authority Official.

**1-METHOXY-2-PROPANOL**

This product, when disposed of in its unused and uncontaminated state, must be treated as a 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.

**BUTANE**

No waste key number according to the European list of waste types can be assigned to this product, since this classification is based on the use (not yet determined) for which the product is intended for the consumer.

The key number for the waste must be determined according to the European waste type list (decision on the EU waste type list 2000/532 / EC) in collaboration with the disposal company / producer / authority Official.

## FAIRING DETERGENT

SODIUM NITRITE

Contact the manufacturer for recycling. Check for recycling. Contact the waste center for recycling

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

ADR / RID, IMDG, 1950  
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 1907/2006Product

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:

**FAIRING DETERGENT**

<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>Ox. Sol. 2</b>	Oxidising solid, category 2
<b>Press. Gas (Liq.)</b>	Liquefied gas
<b>Press. Gas</b>	Pressurised gas
<b>Acute Tox. 3</b>	Acute toxicity, category 3
<b>Eye Irrit. 2</b>	Eye irritation, category 2
<b>STOT SE 3</b>	Specific target organ toxicity - single exposure, category 3
<b>Aquatic Acute 1</b>	Hazardous to the aquatic environment, acute toxicity, category 1
<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>H272</b>	May intensify fire; oxidiser.
<b>H280</b>	Contains gas under pressure; may burst if heated.
<b>H301</b>	Toxic if swallowed.
<b>H319</b>	Causes serious eye irritation.
<b>H336</b>	May cause drowsiness or dizziness.
<b>H400</b>	Very toxic to aquatic life.

**LEGEND:**

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



**GENERAL BIBLIOGRAPHY**

1. Regulation (EC) 1907/2006 (REACH) of the European Parliament
  2. Regulation (EC) 1272/2008 (CLP) of the European Parliament
  3. 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
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  15. Regulation (EU) 2018/1480 (XIII Atp. CLP)
  16. Regulation (EU) 2019/521 (XII Atp. CLP)
- The Merck Index. - 10th Edition
  - Handling Chemical Safety
  - INRS - Fiche Toxicologique (toxicological sheet)
  - Patty - Industrial Hygiene and Toxicology
  - N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition
  - IFA GESTIS website
  - ECHA website
  - Database of SDS models for chemicals - Ministry of Health and ISS (Istituto Superiore di Sanità) - Italy

**Note for users:**

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

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

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

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

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.