

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 21140-6421
Product name: PRESSURE REDUCERS CLEANER

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

Intended use: Descaling detergent for gas pressure reducers

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

Product distribution by:

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

Extremely flammable aerosol.

H229

Pressurised container: may burst if heated.

Aspiration hazard, category 1

H304

May be fatal if swallowed and enters airways.

Serious eye damage, category 1

H318

Causes serious eye damage.

Skin irritation, category 2

H315

Causes skin irritation.

Specific target organ toxicity - single exposure, category 3

H335

May cause respiratory irritation.

Specific target organ toxicity - single exposure, category 3

H336

May cause drowsiness or dizziness.

2.2. Label elements

PRESSURE REDUCERS CLEANER

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.
H304	May be fatal if swallowed and enters airways.
H318	Causes serious eye damage.
H315	Causes skin irritation.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.

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.
P331	Do NOT induce vomiting.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Contains:	HYDROCARBONS, C6, ISOALKANS, <5% N-HEXANE ISOBUTYL ALCOHOL 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)
ISOBUTYL ALCOHOL		
CAS 78-83-1	37,5 ≤ x < 40	Flam. Liq. 3 H226, Eye Dam. 1 H318, Skin Irrit. 2 H315, STOT SE 3 H335, STOT SE 3 H336
EC 201-148-0		
INDEX 603-108-00-1		
Reg. no. 01-2119484609-23-XXXX		

PRESSURE REDUCERS CLEANER

**HYDROCARBONS, C6,
ISOALKANS, <5% N-HEXANE**

CAS 64742-49-0

 $37,5 \leq x < 40$

Asp. Tox. 1 H304, EUH066

EC 931-254-9

INDEX -

Reg. no. 01-2119484651-34-XXXX

PETROLEUM GAS, LIQUEFIED

CAS 68476-85-7

 $18 \leq x < 19,5$

Flam. Gas 1A H220, Press. Gas (Comp.) H280, Classification note according to Annex VI to the CLP Regulation: K

EC 270-704-2

INDEX -

Reg. no. 01-2119485911-31-XXXX

ETHYL ACETATE

CAS 141-78-6

 $5 \leq x < 6$

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

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: 0,00 %

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.

PRESSURE REDUCERS CLEANER

5.2. Special hazards arising from the substance or mixture

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE

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

5.3. Advice for firefighters

GENERAL INFORMATION

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

SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS

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

SECTION 6. Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures**

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

6.2. Environmental precautions

Do not disperse in the environment.

6.3. Methods and material for containment and cleaning up

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

6.4. Reference to other sections

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

SECTION 7. Handling and storage**7.1. Precautions for safe handling**

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

7.2. Conditions for safe storage, including any incompatibilities

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

7.3. Specific end use(s)

Information not available

PRESSURE REDUCERS CLEANER

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

HYDROCARBONS, C6, ISOALKANS, <5% N-HEXANE

Threshold Limit Value

Type	Country	TWA/8h	STEL/15min	Remarks / Observations
		mg/m3	ppm	
		mg/m3	ppm	
TLV-ACGIH		1441	400	

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				1301 mg/kg bw/d				
Inhalation				1131 mg/m3				5306 mg/m3
Skin				1377 mg/kg bw/d				13964 mg/kg bw/d

ISOBUTYL ALCOHOL

Threshold Limit Value

Type	Country	TWA/8h	STEL/15min	Remarks / Observations
		mg/m3	ppm	
		mg/m3	ppm	
VLA	ESP	154	50	
VLEP	FRA	150	50	
WEL	GBR	154	50	231 75
TLV	NOR	75	25	SKIN
TLV-ACGIH		152	50	

Predicted no-effect concentration - PNEC

Normal value in fresh water	0,4	mg/l
Normal value in marine water	0,04	mg/l
Normal value for fresh water sediment	1,56	mg/kg
Normal value for marine water sediment	0,156	mg/kg
Normal value of STP microorganisms	10	mg/l
Normal value for the terrestrial compartment	0,076	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	Acute local	Acute	Chronic local	Chronic

PRESSURE REDUCERS CLEANER

	systemic	systemic	systemic
Inhalation	55 mg/m3		310 mg/m3

PETROLEUM GAS, LIQUEFIED

Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers				Effects on workers			
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Inhalation				0,066 mg/m3				2,21 mg/m3
Skin								23,4 mg/kg bw/d

ETHYL ACETATE

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations		
		mg/m3	ppm	mg/m3	ppm			
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 concentration - PNEC

Normal value in fresh water	0,24	mg/l
Normal value in marine water	0,024	mg/l
Normal value for fresh water sediment	1,15	mg/kg
Normal value for marine water sediment	0,115	mg/kg
Normal value of STP microorganisms	650	mg/l
Normal value for the food chain (secondary poisoning)	0,2	mg/kg
Normal value for the terrestrial compartment	0,148	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				4,5 mg/kg bw/d				
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
Skin				37 mg/kg bw/d				63 mg/kg bw/d

Legend:

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

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

8.2. Exposure controls

PRESSURE REDUCERS CLEANER

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

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

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

Provide an emergency shower with face and eye wash station.

HAND PROTECTION

None required.

SKIN PROTECTION

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

EYE PROTECTION

Wear airtight protective goggles (see standard EN 166).

RESPIRATORY PROTECTION

If the threshold value (e.g. TLV-TWA) is exceeded for the substance or one of the substances present in the product, a mask with a type AX filter combined with a type P filter should be worn (see standard EN 14387).

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

ENVIRONMENTAL EXPOSURE CONTROLS

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

HYDROCARBONS, C6, ISOALKANS, <5% N-HEXANE

Chemical resistant gloves are recommended. Nitrile, standards CEN EN 420 and EN 374 provide general requirements and lists of types of gloves.

ISOBUTYL ALCOHOL

Suitable safety gloves resistant to chemicals (EN 374) also with prolonged direct contact (Recommended: protection index 6, corresponding to > 480 minutes of breakthrough time according to EN 374): Eg nitrile rubber (0.4 mm), chloroprene rubber (0.5mm), butyl rubber (0.7mm) etc.

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

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.

ETHYL ACETATE

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

SECTION 9. Physical and chemical properties**9.1. Information on basic physical and chemical properties**

Appearance	aerosol
Colour	colourless
Odour	characteristic

PRESSURE REDUCERS CLEANER

Odour threshold	Not available
pH	Not available
Melting point / freezing point	Not available
Initial boiling point	Not available
Boiling range	Not available
Flash point	< 20 °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	0,75
Solubility	partially soluble in water
Partition coefficient: n-octanol/water	Not available
Auto-ignition temperature	> 300 °C
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.

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.

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.

ISOBUTYL ALCOHOL

PRESSURE REDUCERS CLEANER

Reacts with strong oxidizing agents

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.

10.4. Conditions to avoid

Avoid overheating.

HYDROCARBONS, C6, ISOALKANS, <5% N-HEXANE

Open flames and high energy ignition sources.

ETHYL ACETATE

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

Ignition sources.

10.5. Incompatible materials

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

HYDROCARBONS, C6, ISOALKANS, <5% N-HEXANE

Strong oxidants.

ISOBUTYL ALCOHOL

Strong oxidizing agents

ETHYL ACETATE

Incompatible with: acids,bases,strong oxidants,aluminium,nitrates,chlorosulphuric acid.Incompatible materials: plastic materials.

Oxidizing agents, acids, alkalis.

10.6. Hazardous decomposition products

ETHYL ACETATE

Carbon oxides on combustion.

PRESSURE REDUCERS CLEANER

SECTION 11. Toxicological information

In the absence of experimental data for the product itself, health hazards are evaluated according to the properties of the substances it contains, using the criteria specified in the applicable regulation for classification.

It is therefore necessary to take into account the concentration of the individual hazardous substances indicated in section 3, to evaluate the toxicological effects of exposure to the product.

11.1. Information on toxicological effectsMetabolism, toxicokinetics, mechanism of action and other information

Information not available

Information on likely routes of exposure

Information not available

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

Information not available

Interactive effects

Information not available

ACUTE TOXICITY

LC50 (Inhalation) of the mixture:

Not classified (no significant component)

LD50 (Oral) of the mixture:

Not classified (no significant component)

LD50 (Dermal) of the mixture:

Not classified (no significant component)

HYDROCARBONS, C6, ISOALKANS, <5% N-HEXANE

LD50 (Oral) > 25 mg/kg Rat

LD50 (Dermal) > 5 mg/kg Rabbit

LC50 (Inhalation) 73860 ppm/4h Rat

HYDROCARBONS, C6, ISOALKANS, <5% N-HEXANE

Method: Equivalent or similar to OECD 401

Reliability: 1

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

Route of exposure: Oral

Results: LD50:> 5 000 mg / kg bw

Method: Equivalent or similar to OECD 403

Reliability: 1

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

Route of exposure: Inhalation (vapors)

PRESSURE REDUCERS CLEANER

Results: LC50:> 4 951 mg / m³ air
Method: Equivalent or similar to OECD 402
Reliability: 1
Species: Rat (Crj: CD (SD); male / female)
Route of exposure: Dermal
Results: LD50:> 2 000 mg / kg bw

ISOBUTYL ALCOHOL

Method: OECD 401
Reliability: 1
Species: Rat (Sprague-Dawley; male / female)
Route of exposure: Oral
Results: LD50> 2830 mg / kg bw
Method: OECD 402
Reliability: 1
Species: Rabbit (New Zealand White; male / female)
Route of exposure: Inhalation
Results: LD50> 2000 mg / kg bw
Method: OECD 402
Reliability: 1
Species: Rabbit (New Zealand White; male / female)
Route of exposure: Dermal
Results: LD50> 2000 mg / kg bw

PETROLEUM GAS, LIQUEFIED

Method: Not indicated-Read across
Reliability: 2
Species: Rat (Alderley Park (SPF); male / female)
Route of exposure: Inhalation
Results: Not classified, LC50 = 1443 mg / L air

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

SKIN CORROSION / IRRITATION

Causes skin irritation

HYDROCARBONS, C6, ISOALKANS, <5% N-HEXANE

Method: OECD 404
Reliability: 1
Species: Rabbit (New Zealand White)
Route of exposure: Dermal
Results: Irritating

SERIOUS EYE DAMAGE / IRRITATION

Causes serious eye damage

PRESSURE REDUCERS CLEANER

HYDROCARBONS, C6, ISOALKANS, <5% N-HEXANE

Method: OECD 405

Reliability: 1

Species: Rabbit (New Zealand White)

Route of exposure: Ocular

Results: Not irritating

ISOBUTYL ALCOHOL

Method: OECD 405

Reliability: 1

Species: Rabbit (New Zealand White)

Route of exposure: Ocular

Results: Corrosive

ETHYL ACETATE

Method: OECD 405

Reliability: 2

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

HYDROCARBONS, C6, ISOALKANS, <5% N-HEXANE

Method: Equivalent or similar to OECD 406

Reliability: 2

Species: guinea pig (Hartley; female)

Route of exposure: Dermal

Results: Not sensitizing

ISOBUTYL ALCOHOL

Method: QSAR

Reliability: 1

Species: Not indicated

Route of exposure: Dermal

Results: Not classified

Skin sensitization

ETHYL ACETATE

Method: OECD 406

Reliability: 1

Species: guinea pig (Dunkin-Hartley; female)

Route of exposure: Dermal

Results: Not sensitizing

GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

HYDROCARBONS, C6, ISOALKANS, <5% N-HEXANE

PRESSURE REDUCERS CLEANER

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: 1

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

Route of exposure: Oral

Results: Negative

ISOBUTYL ALCOHOL

Method: Not indicated - in vitro test

Reliability: 2

Species: Chinese hamster

Results: Negative with and without metabolic activation

Bibliographic reference: Evaluation of the genotoxic potential of some microbial volatile organic compounds (MVOC) with the comet assay, the micronucleus assay and the HPRT gene mutation assay, Kreja L, Seidel H-J (2002)

Method: OECD 474-test in vivo

Reliability: 1

Species: Mouse (NMRI; male / female)

Route of exposure: Oral

Results: Negative

PETROLEUM GAS, LIQUEFIED

Method: OECD 471-in vitro test-Read across

Reliability: 1

Species: *S. typhimurium*

Results: Negative with and without metabolic activation

Method: OECD 474-Read across

Reliability: 1

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

Route of exposure: Inhalation (gas)

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

CARCINOGENICITY

Does not meet the classification criteria for this hazard class

HYDROCARBONS, C6, ISOALKANS, <5% N-HEXANE

Method: Equivalent or similar to OECD 403

Reliability: 1

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

Route of exposure: Inhalation (vapors)

Results: Negative. The NOAEC for rat females was determined to be 2200 mg / m3. The NOAEC for male rats was determined to be 138 mg / m3.

PRESSURE REDUCERS CLEANER

PETROLEUM GAS, LIQUEFIED

Method: Equivalent or similar to EPA OPP 83-5-Read across

Reliability: 1

Species: Rat (Fischer 344; male / female)

Route of exposure: Oral

Results: LOAEL = 25 mg / kg bw / day

REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class

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

HYDROCARBONS, C6, ISOALKANS, <5% N-HEXANE

Method: OECD TG 413

Reliability: 1

Species: Rat (Fischer 344; male / female)

Route of exposure: Inhalation (vapors)

Results: Negative. NOAEC (fertility) \geq 400 ppm

ISOBUTYL ALCOHOL

Method: EPA OPPTS 870.3800

Reliability: 1

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

Route of exposure: Inhalation (vapors)

Results: Negative, NOAEL (fertility) $>$ = 7.5 mg / L air

PETROLEUM GAS, LIQUEFIED

Method: OECD 413

Reliability: 1

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

Route of exposure: Inhalation

Results: Negative, NOAEC (fertility) = 10000 ppm

Adverse effects on development of the offspring

HYDROCARBONS, C6, ISOALKANS, <5% N-HEXANE

Method: Guidelines for Reproduction Studies for Safety and Evaluation of Drugs for Human Use, Segment II (Teratology Study)

Reliability: 1

Species: Rat (Sprague-Dawley)

Route of exposure: Inhalation (vapors)

Results: Negative. NOAEC (development) $>$ = 300 ppm

ISOBUTYL ALCOHOL

PRESSURE REDUCERS CLEANER

Method: OECD 414

Reliability: 1

Species: Rat (Wistar)

Route of exposure: Inhalation (vapors)

Results: Negative, NOAEL (development) = 10 mg / L air

PETROLEUM GAS, LIQUEFIED

Method: OECD 414

Reliability: 1

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

Route of exposure: Inhalation (gas)

Results: Negative, NOAEC (development) = 10426 ppm

STOT - SINGLE EXPOSURE

May cause respiratory irritation

May cause drowsiness or dizziness

HYDROCARBONS, C6, ISOALKANS, <5% N-HEXANE

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

ISOBUTYL ALCOHOL

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

PETROLEUM GAS, LIQUEFIED

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

Target organ

ISOBUTYL ALCOHOL

Respiratory tract

ETHYL ACETATE

Central nervous system

Route of exposure

ETHYL ACETATE

Inhalation

STOT - REPEATED EXPOSURE

Does not meet the classification criteria for this hazard class

HYDROCARBONS, C6, ISOALKANS, <5% N-HEXANE

PRESSURE REDUCERS CLEANER

Method: Equivalent or similar to OECD 422
Reliability: 1
Species: Rat (Sprague-Dawley; male / female)
Route of exposure: Oral
Results: Negative. NOAEL > = 1000 mg / kg / day
Method: Equivalent or similar to OECD 413
Reliability: 1
Species: Rat (albino; male / female)
Route of exposure: Inhalation (vapors)
Results: Negative. NOAEC = 10186 mg / m³

ISOBUTYL ALCOHOL

Method: OECD 408
Reliability: 1
Species: Rat (Wistar; male / female)
Route of exposure: Oral
Results: Negative, NOAEL > 1450 mg / kg bw / day
Method: EPA OPPTS 870.3800
Reliability: 1
Species: Rat (Sprague-Dawley; male / female)
Route of exposure: Inhalation (vapors)
Results: Negative, NOAEL = 7.5 mg / L air

PETROLEUM GAS, LIQUEFIED

Method: OECD 413
Reliability: 1
Species: Rat (Sprague-Dawley; male / female)
Route of exposure: Inhalation (gas)
Results: NOAEC = 10000 ppm

ETHYL ACETATE

Method: Equivalent or similar to EPA OTS 795.2600
Reliability: 2
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 (CrI: CD®BR; male / female)
Route of exposure: Inhalation
Results: LOEC 350 ppm

ASPIRATION HAZARD

Toxic for aspiration

SECTION 12. Ecological information

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

12.1. Toxicity

Information not available

PRESSURE REDUCERS CLEANER

12.2. Persistence and degradability

HYDROCARBONS, C6, ISOALKANS, <5% N-HEXANE

Rapidly degradable in water, 80% in 28 days.

ISOBUTYL ALCOHOL

Easily degradable in water, 70-80% in 28 days.

ETHYL ACETATE

Rapidly degradable, 60% in 10 days.

ETHYL ACETATE

Solubility in water

> 10000 mg/l

Rapidly degradable

ISOBUTYL ALCOHOL

Solubility in water

1000 - 10000 mg/l

Rapidly degradable

12.3. Bioaccumulative potential

ETHYL ACETATE

Partition coefficient: n-octanol/water

0,68

BCF

30

ISOBUTYL ALCOHOL

Partition coefficient: n-octanol/water

1

12.4. Mobility in soil

ISOBUTYL ALCOHOL

Partition coefficient: soil/water

0,31

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.

PRESSURE REDUCERS CLEANER

HYDROCARBONS, C6, ISOALKANS, <5% N-HEXANE

Empty Container Warning Empty Container Warning (where applicable): Empty containers may contain debris and may be hazardous. Do not attempt to fill or clean containers without proper instructions. Empty drums must be completely drained and stored safely until they are properly reconditioned or disposed of. Empty containers must be recycled, recovered or disposed of through an appropriately qualified or authorized contractor and in accordance with government regulations. DO NOT PRESSURIZE, CUT, WELD, BRAZE, WELD, DRILL, GRIND OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY OR OTHER IGNITION SOURCES. MAY EXPLODE AND CAUSE INJURY OR DEATH.

ISOBUTYL ALCOHOL

They must be disposed of or incinerated in accordance with local regulations.

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.

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

PRESSURE REDUCERS CLEANER

ADR / RID:	HIN - Kemler: --	Limited Quantities: 1 L	Tunnel restriction code: (D)
IMDG:	Special Provision: - EMS: F-D, S-U	Limited Quantities: 1 L	
IATA:	Cargo:	Maximum quantity: 150 Kg	Packaging instructions: 203
	Pass.:	Maximum quantity: 75 Kg	Packaging instructions: 203
	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 40Substances 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.

PRESSURE REDUCERS CLEANER

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. Gas 1A	Flammable gas, category 1A
Aerosol 1	Aerosol, category 1
Aerosol 3	Aerosol, category 3
Flam. Liq. 2	Flammable liquid, category 2
Flam. Liq. 3	Flammable liquid, category 3
Press. Gas (Comp.)	Compressed gas
Asp. Tox. 1	Aspiration hazard, category 1
Eye Dam. 1	Serious eye damage, category 1
Eye Irrit. 2	Eye irritation, category 2
Skin Irrit. 2	Skin irritation, category 2
STOT SE 3	Specific target organ toxicity - single exposure, category 3
H220	Extremely flammable gas.
H222	Extremely flammable aerosol.
H229	Pressurised container: may burst if heated.
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H280	Contains gas under pressure; may burst if heated.
H304	May be fatal if swallowed and enters airways.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H315	Causes skin irritation.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
EUH066	Repeated exposure may cause skin dryness or cracking.

LEGEND:

- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- CAS NUMBER: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE NUMBER: Identifier in ESIS (European archive of existing substances)
- CLP: EC Regulation 1272/2008
- DNEL: Derived No Effect Level
- EmS: Emergency Schedule
- GHS: Globally Harmonized System of classification and labeling of chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulation
- IC50: Immobilization Concentration 50%
- IMDG: International Maritime Code for dangerous goods
- IMO: International Maritime Organization
- INDEX NUMBER: Identifier in Annex VI of CLP
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%

PRESSURE REDUCERS CLEANER

- 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
 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
 - 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.