

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 15320-2930
Product name: CHAIN CLEANER

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

Intended use: Degreasing detergent for chains

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 H229	Extremely flammable aerosol. Pressurised container: may burst if heated.
Eye irritation, category 2	H319	Causes serious eye irritation.
Specific target organ toxicity - single exposure, category 3	H336	May cause drowsiness or dizziness.
Hazardous to the aquatic environment, chronic toxicity, category 2	H411	Toxic to aquatic life with long lasting effects.

2.2. Label elements

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

CHAIN CLEANER

Hazard pictograms:



Signal words:

Danger

Hazard statements:

H222	Extremely flammable aerosol.
H229	Pressurised container: may burst if heated.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
H411	Toxic to aquatic life with long lasting effects.
EUH066	Repeated exposure may cause skin dryness or cracking.

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.
P301+P310	IF SWALLOWED: immediately call a POISON CENTER / doctor.

Contains: HYDROCARBONS, C6, ISOALKANS, <5% N-HEXANE
ACETONE
PROPAN-2-OL

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)
ACETONE		
CAS 67-64-1	35 ≤ x < 37,5	Flam. Liq. 2 H225, Eye Irrit. 2 H319, STOT SE 3 H336, EUH066
EC 200-662-2		
INDEX 606-001-00-8		
Reg. no. 01-2119471330-49-XXXX		
HYDROCARBONS, C6, ISOALKANS, <5% N-HEXANE		
CAS 64742-49-0	35 ≤ x < 37,5	Asp. Tox. 1 H304, EUH066

CHAIN CLEANER

EC 931-254-9

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Reg. no. 01-2119484651-34-XXXX

PROPAN-2-OL

CAS 67-63-0 $18 \leq x < 19,5$ Flam. Liq. 2 H225, Eye Irrit. 2 H319, STOT SE 3 H336

EC 200-661-7

INDEX 603-117-00-0

Reg. no. 01-2119457558-25-XXXX

CARBON DIOXIDE

CAS 124-38-9 $8 \leq x < 9$ Press. Gas (Liq.) H280

EC 204-696-9

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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: 8,00 %

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

CHAIN CLEANER

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

5.3. Advice for firefighters**GENERAL INFORMATION**

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

SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS

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

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

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

6.2. Environmental precautions

Do not disperse in the environment.

6.3. Methods and material for containment and cleaning up

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

6.4. Reference to other sections

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

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

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

7.2. Conditions for safe storage, including any incompatibilities

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

7.3. Specific end use(s)

Information not available

SECTION 8. Exposure controls/personal protection**8.1. Control parameters**

CHAIN CLEANER

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

ACETONE**Threshold Limit Value**

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

Predicted no-effect concentration - PNEC

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

Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers			Effects on workers				
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral				62 mg/kg bw/d				

CHAIN CLEANER

Inhalation	200 mg/m3	2420 mg/m3	1210 mg/m3
Skin	62 mg/kg bw/d		186 mg/kg bw/d

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

CARBON DIOXIDE**Threshold Limit Value**

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
VLA	ESP	9150	5000			
WEL	GBR	9150	5000	27400	15000	
VLEP	ITA	9000	5000			
TLV	NOR	9000	5000			
VLE	PRT	9000	5000			
OEL	EU	9000	5000			
TLV-ACGIH		9000	5000	54000	30000	

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.

CHAIN CLEANER**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.

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.

ACETONE

Protective gloves according to EN 374.

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

Breakthrough time: > 480 min.

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

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.

SECTION 9. Physical and chemical properties

CHAIN CLEANER**9.1. Information on basic physical and chemical properties**

Appearance	aerosol
Colour	colourless
Odour	characteristic of solvent
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	0,755
Solubility	insoluble 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

VOC (Directive 2010/75/EC) : 100,00 % - 755,00 g/litre

SECTION 10. Stability and reactivity**10.1. Reactivity**

There are no particular risks of reaction with other substances in normal conditions of use.

ACETONE

Decomposes under the effect of heat.

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

10.2. Chemical stability

CHAIN CLEANER

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.

ACETONE

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

PROPAN-2-OL

Vapors can form an explosive mixture with air.

10.4. Conditions to avoid

Avoid overheating.

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

Open flames and high energy ignition sources.

ACETONE

Avoid exposure to: sources of heat, naked flames.

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

10.5. Incompatible materials

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

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

Strong oxidants.

ACETONE

Incompatible with: acids, oxidising substances.

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

10.6. Hazardous decomposition products

CHAIN CLEANER**ACETONE**

May develop: ketenes, irritant substances.

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

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

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)

PROPAN-2-OL

LD50 (Oral) 4710 mg/kg Rat

LD50 (Dermal) 12800 mg/kg Rat

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

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

LD50 (Oral) > 25 mg/kg Rat

LD50 (Dermal) > 5 mg/kg Rabbit

CHAIN CLEANER

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)

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

ACETONE

Method: Not indicated

Reliability: 2

Species: Rat (Sprague-Dawley)

Route of exposure: Oral

Results: LD50 = 5800 mg / kg bw

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

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)

SKIN CORROSION / IRRITATION

Repeated exposure may cause skin dryness or cracking.

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

Method: OECD 404

Reliability: 1

CHAIN CLEANER

Species: Rabbit (New Zealand White)
Route of exposure: Dermal
Results: Irritating

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)

SERIOUS EYE DAMAGE / IRRITATION

Causes serious eye irritation

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

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

PROPAN-2-OL

Method: Equivalent or similar to OECD 405
Reliability: 1
Species: Rabbit (New Zealand White)
Route of exposure: Ocular
Results: Category 2

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

ACETONE

Method: Not indicated
Reliability: 2
Species: guinea pig (Hartley; female)
Route of exposure: Dermal
Results: Not sensitizing
Bibliographic reference: A new protocol and criteria for quantitative determination of sensitization potencies of chemicals by guinea pig maximization test, Nakamura A, Momma J, Sekiguchi H, Noda T, Yamano T, Kaniwa MA, Kojima S, Tsuda M, Kurokawa Y (1994)

PROPAN-2-OL

Method: OECD 406
Reliability: 1

CHAIN CLEANER

Species: guinea pig (Hartley; male / 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

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

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

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.

ACETONE

Method: Not indicated

Reliability: 2

Species: Mouse (ICR; female)

Route of exposure: Dermal

Results: Negative

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

REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class

PROPAN-2-OL

CHAIN CLEANER

Method: Equivalent or similar to OECD 416
Reliability: 1
Species: Rat (Sprague-Dawley; male / female)
Route of exposure: Oral
Results: NOAEL 500

Adverse effects on sexual function and fertility
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

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) \geq 300 ppm

ACETONE

Method: Equivalent or similar to OECD 414
Reliability: 1
Species: Rat (Sprague-Dawley)
Route of exposure: Inhalation (vapors)
Results: Negative, NOAEC (development) = 2200 ppm

STOT - SINGLE EXPOSURE

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.

ACETONE

Based on available data and through expert judgment, the substance is 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.

CARBON DIOXIDE

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

Target organ
ACETONE

Narcotic effects

CHAIN CLEANER

Route of exposure
ACETONE

Inhalation

PROPAN-2-OL

Inhalation

STOT - REPEATED EXPOSURE

Does not meet the classification criteria for this hazard class

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

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

ACETONE

Method: Equivalent or similar to OECD 408

Reliability: 1

Species: Rat (Fischer 344; male / female)

Route of exposure: Oral

Results: Negative, NOAEL = 10000 ppm

Method: Not indicated

Reliability: 2

Species: Rat (Sprague-Dawley; male)

Route of exposure: Inhalation

Results: Negative, NOAEC = 19000 ppm

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

Method: Not indicated

Reliability: 2

Species: Not indicated

Route of exposure: Dermal

Results: Negative

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

PROPAN-2-OL

Method: OECD 451

Reliability: 1

Species: Rat (Fischer 344; male / female)

Route of exposure: Inhalation (vapors)

Results: NOAEC = 5000 ppm

CARBON DIOXIDE

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

CHAIN CLEANER

ASPIRATION HAZARD

Does not meet the classification criteria for this hazard class

SECTION 12. Ecological information

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

12.1. Toxicity

Information not available

12.2. Persistence and degradability

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

Rapidly degradable in water, 80% in 28 days.

ACETONE

Easily degradable in water, 90.9% in 28 days.

PROPAN-2-OL

Quickly degradable in water.

PROPAN-2-OL

Rapidly degradable

ACETONE

Rapidly degradable

12.3. Bioaccumulative potential

PROPAN-2-OL

Partition coefficient: n-octanol/water 0,05

ACETONE

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

BCF 3

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

CHAIN CLEANER**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.

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.

ACETONE

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

PROPAN-2-OL

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

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

CHAIN CLEANER

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)
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: P3b-E2

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

<u>Product</u>	
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

CHAIN CLEANERSubstances 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:

Aerosol 1	Aerosol, category 1
Aerosol 3	Aerosol, category 3
Flam. Liq. 2	Flammable liquid, category 2
Press. Gas (Liq.)	Liquefied gas
Asp. Tox. 1	Aspiration hazard, category 1
Eye Irrit. 2	Eye irritation, category 2
STOT SE 3	Specific target organ toxicity - single exposure, category 3
Aquatic Chronic 2	Hazardous to the aquatic environment, chronic toxicity, category 2
H222	Extremely flammable aerosol.
H229	Pressurised container: may burst if heated.
H225	Highly flammable liquid and vapour.
H280	Contains gas under pressure; may burst if heated.
H304	May be fatal if swallowed and enters airways.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
H411	Toxic to aquatic life with long lasting effects.
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%

CHAIN 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

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 4. Regulation (EU) 2015/830 of the European Parliament
 5. Regulation (EU) 286/2011 (II Atp. CLP) of the European Parliament
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 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.