

**AT - Oxide remover
6421**



SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

- 1.1 Product identifier:** AT - Oxide remover
6421
- Other means of identification:**
- UFI:** 0AEO-W0GA-3004-CX65
- 1.2 Relevant identified uses of the substance or mixture and uses advised against:**
Relevant uses (Consumer use): Cleaner
Relevant uses (Professional users): Cleaner
Uses advised against: All uses not specified in this section or in section 7.3
- 1.3 Details of the supplier of the safety data sheet:**
AT-Tuote Oy
PL 37
FI-04131 Sipoo - Finland
Phone: +358 9 274 5500
info@attuote.fi
www.attuote.fi
- 1.4 Emergency telephone number:** General emergency number: 112, Poison Information Centre HUS: 09-471977 (Finland)

SECTION 2: HAZARDS IDENTIFICATION

- 2.1 Classification of the substance or mixture:**
- CLP Regulation (EC) No 1272/2008:**
Classification of this product has been carried out in accordance with CLP Regulation (EC) No 1272/2008.
Aerosol 1: Flammable aerosols, Category 1, H222
Aerosol 1: Pressurised container: May burst if heated., H229
Aquatic Chronic 2: Hazardous to the aquatic environment, long-term hazard, Category 2, H411
Skin Irrit. 2: Skin irritation, Category 2, H315
STOT SE 3: Specific toxicity causing drowsiness and dizziness, single exposure, Category 3, H336

2.2 Label elements:

CLP Regulation (EC) No 1272/2008:

Danger



Hazard statements:

Aerosol 1: H222 - Extremely flammable aerosol.
Aerosol 1: H229 - Pressurised container: May burst if heated.
Aquatic Chronic 2: H411 - Toxic to aquatic life with long lasting effects.
Skin Irrit. 2: H315 - Causes skin irritation.
STOT SE 3: H336 - May cause drowsiness or dizziness.

Precautionary statements:

P101: If medical advice is needed, have product container or label at hand.
P102: Keep out of reach of children.
P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P211: Do not spray on an open flame or other ignition source.
P251: Do not pierce or burn, even after use.
P280: Wear protective gloves/protective clothing/eye protection/protective footwear.
P410+P412: Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122°F
P501: Dispose of contents/container according to the separated collection system used in your municipality.

Supplementary information:

EUH208: Contains Benzenesulfonic acid, mono-C16-24-alkyl derivs., calcium salts, Benzenesulfonic acid, di-C10-14-alkyl derivs., calcium salts TBN < 300. May produce an allergic reaction.

Substances that contribute to the classification

Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane; pentane; Hydrocarbons, C6, isoalkanes, <5% n-hexane

2.3 Other hazards:

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SECTION 2: HAZARDS IDENTIFICATION (continued)

Product does not meet PBT/vPvB criteria
Endocrine-disrupting properties: The product does not meet the criteria.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substance:

Not relevant

3.2 Mixture:

Chemical description: Aerosol

Components:

In accordance with Annex II of Regulation (EC) No 1907/2006 (point 3), the product contains:

Identification	Chemical name/Classification		Concentration
CAS: Not relevant EC: 921-024-6 Index: Not relevant REACH: 01-2119475514-35-XXXX	Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane⁽¹⁾	Self-classified	50 - <75%
	Regulation 1272/2008	Aquatic Chronic 2: H411; Asp. Tox. 1: H304; Flam. Liq. 2: H225; Skin Irrit. 2: H315; STOT SE 3: H336 - Danger	
CAS: 109-66-0 EC: 203-692-4 Index: 601-006-00-1 REACH: 01-2119459286-30-XXXX	pentane⁽¹⁾	ATP CLP00	10 - <25%
	Regulation 1272/2008	Aquatic Chronic 2: H411; Asp. Tox. 1: H304; Flam. Liq. 2: H225; STOT SE 3: H336; EUH066 - Danger	
CAS: 64742-49-0 EC: 931-254-9 Index: Not relevant REACH: 01-2119484651-34-XXXX	Hydrocarbons, C6, isoalkanes, <5% n-hexane⁽¹⁾	Self-classified	10 - <25%
	Regulation 1272/2008	Aquatic Chronic 2: H411; Asp. Tox. 1: H304; Flam. Liq. 2: H225; Skin Irrit. 2: H315; STOT SE 3: H336 - Danger	
CAS: 70024-69-0 EC: 274-263-7 Index: Not relevant REACH: Not relevant	Benzenesulfonic acid, mono-C16-24-alkyl derivs., calcium salts⁽¹⁾	Self-classified	2.5 - <10%
	Regulation 1272/2008	Skin Sens. 1B: H317 - Warning	
CAS: 124-38-9 EC: 204-696-9 Index: Not relevant REACH: Not relevant	Carbon dioxide⁽²⁾	Self-classified	1 - <2.5%
	Regulation 1272/2008	Press. Gas: H280 - Warning	
CAS: Not relevant EC: 939-603-7 Index: Not relevant REACH: 01-2119978241-36-XXXX	Benzenesulfonic acid, di-C10-14-alkyl derivs., calcium salts TBN < 300⁽¹⁾	Self-classified	1 - <2.5%
	Regulation 1272/2008	Skin Sens. 1B: H317 - Warning	

⁽¹⁾ Substances presenting a health or environmental hazard which meet criteria laid down in Regulation (EU) No. 2020/878

⁽²⁾ Substance with a Union workplace exposure limit

To obtain more information on the hazards of the substances consult sections 11, 12 and 16.

Other information:

Identification	Specific concentration limit
Benzenesulfonic acid, mono-C16-24-alkyl derivs., calcium salts CAS: 70024-69-0 EC: 274-263-7	% (w/w) >=10: Skin Sens. 1B - H317
Benzenesulfonic acid, di-C10-14-alkyl derivs., calcium salts TBN < 300 CAS: Not relevant EC: 939-603-7	% (w/w) >=10: Skin Sens. 1B - H317

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures:

The symptoms resulting from intoxication can appear after exposure, therefore, in case of doubt, seek medical attention for direct exposure to the chemical product or persistent discomfort, showing the SDS of this product.

By inhalation:

Remove the person affected from the area of exposure, provide with fresh air and keep at rest. In serious cases such as cardiorespiratory failure, artificial resuscitation techniques will be necessary (mouth to mouth resuscitation, cardiac massage, oxygen supply, etc.) requiring immediate medical assistance.

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SECTION 4: FIRST AID MEASURES (continued)

By skin contact:

Remove contaminated clothing and footwear, rinse skin or shower the person affected if appropriate with plenty of cold water and neutral soap. In serious cases see a doctor. If the product causes burns or freezing, clothing should not be removed as this could worsen the injury caused if it is stuck to the skin. If blisters form on the skin, these should never be burst as this will increase the risk of infection.

By eye contact:

Rinse eyes thoroughly with water for at least 15 minutes. If the injured person uses contact lenses, these should be removed unless they are stuck to the eyes, in which case removal could cause further damage. In all cases, after cleaning, a doctor should be consulted as quickly as possible with the SDS for the product.

By ingestion/aspiration:

Do not induce vomiting, but if it does happen keep the head down to avoid aspiration. Keep the person affected at rest. Rinse out the mouth and throat, as they may have been affected during ingestion.

4.2 Most important symptoms and effects, both acute and delayed:

Acute and delayed effects are indicated in sections 2 and 11.

4.3 Indication of any immediate medical attention and special treatment needed:

Not relevant

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media:

Suitable extinguishing media:

Foam extinguisher (AB), Dry Chemical Powder (ABC) Fire Extinguisher, Carbon dioxide extinguisher (BC)

Unsuitable extinguishing media:

Water jet

5.2 Special hazards arising from the substance or mixture:

As a result of combustion or thermal decomposition reactive sub-products are created that can become highly toxic and, consequently, can present a serious health risk.

5.3 Advice for firefighters:

Depending on the magnitude of the fire it may be necessary to use full protective clothing and self-contained breathing apparatus (SCBA). Minimum emergency facilities and equipment should be available (fire blankets, portable first aid kit,...) in accordance with Directive 89/654/EEC.

Additional provisions:

Act in accordance with the Internal Emergency Plan and the Information Sheets on actions to take after an accident or other emergencies. Eliminate all sources of ignition. In case of fire, cool the storage containers and tanks for products susceptible to combustion, explosion or BLEVE as a result of high temperatures. Avoid spillage of the products used to extinguish the fire into an aqueous medium.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures:

For non-emergency personnel:

Isolate leaks provided that there is no additional risk for the people performing this task. Evacuate the area and keep out those without protection. Personal protection equipment must be used against potential contact with the spilt product (See section 8). Above all prevent the formation of any vapour-air flammable mixtures, through either ventilation or the use of an inert medium. Remove any source of ignition. Eliminate electrostatic charges by interconnecting all the conductive surfaces on which static electricity could form, and also ensuring that all surfaces are connected to the ground.

For emergency responders:

Wear protective equipment. Keep unprotected persons away. See section 8.

6.2 Environmental precautions:

Avoid at all cost any type of spillage into an aqueous medium. Contain the product absorbed appropriately in hermetically sealed containers. Notify the relevant authority in case of exposure to the general public or the environment.

6.3 Methods and material for containment and cleaning up:

It is recommended:

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SECTION 6: ACCIDENTAL RELEASE MEASURES (continued)

Prevent the entrance of product in drains, sewers or watercourses. Absorb the spill using sand or inert absorbent and move it to a safe place. Do not absorb in sawdust or other combustible absorbents. Collect the product in appropriate containers and manage it according to current legislation.

Spillages in water or sea:

Small spillages:

Contain spillage using barriers or similar equipment. Use suitable absorbents for collection and treat the waste in accordance with current regulations.

Large spillages:

If possible, contain spillage in open water using barriers or similar equipment. If this is not possible, try to control its spread and collect the product with suitable mechanical means. Always consult experts before using dispersants and make sure you have the necessary approvals if they are to be used. Treat the waste according to current regulations.

6.4 Reference to other sections:

See sections 8 and 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling:

A.- General precautions for safe use

Comply with the current legislation concerning the prevention of industrial risks. Keep containers hermetically sealed. Control spills and residues, destroying them with safe methods (section 6). Avoid leakages from the container. Maintain order and cleanliness where dangerous products are used.

B.- Technical recommendations for the prevention of fires and explosions

Avoid the evaporation of the product as it contains flammable substances, which could form flammable vapour/air mixtures in the presence of sources of ignition. Control sources of ignition (mobile phones, sparks,...) and transfer at slow speeds to avoid the creation of electrostatic charges. Consult section 10 for conditions and materials that should be avoided.

C.- Technical recommendations on general occupational hygiene

Do not eat or drink during the process, washing hands afterwards with suitable cleaning products.

D.- Technical recommendations to prevent environmental risks

Due to the danger of this product for the environment it is recommended to use it within an area containing contamination control barriers in case of spillage, as well as having absorbent material in close proximity.

7.2 Conditions for safe storage, including any incompatibilities:

A.- Specific storage requirements

Minimum Temp.: 5 °C

Maximum Temp.: 30 °C

Maximum time: 6 Months

B.- General conditions for storage

Avoid sources of heat, radiation, static electricity and contact with food. For additional information see subsection 10.5

7.3 Specific end use(s):

Except for the instructions already specified it is not necessary to provide any special recommendation regarding the uses of this product.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters:

Substances whose occupational exposure limits have to be monitored in the workplace (European OEL, not country-specific legislation):

Directive (EU) 2000/39, Directive 2004/37/EC, Directive (EU) 2006/15, Directive (EU) 2009/161, Directive (EU) 2017/164, Directive (EU) 2019/1831:

Identification		Occupational exposure limits		
pentane CAS: 109-66-0 EC: 203-692-4		IOELV (8h)	1000 ppm	3000 mg/m ³
		IOELV (STEL)		
Carbon dioxide CAS: 124-38-9 EC: 204-696-9		IOELV (8h)	5000 ppm	9000 mg/m ³
		IOELV (STEL)		

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

DNEL (Workers):

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane CAS: Not relevant EC: 921-024-6	Oral	Not relevant	Not relevant	Not relevant	Not relevant
	Dermal	Not relevant	Not relevant	773 mg/kg	Not relevant
	Inhalation	Not relevant	Not relevant	2035 mg/m ³	Not relevant
pentane CAS: 109-66-0 EC: 203-692-4	Oral	Not relevant	Not relevant	Not relevant	Not relevant
	Dermal	Not relevant	Not relevant	432 mg/kg	Not relevant
	Inhalation	Not relevant	Not relevant	3000 mg/m ³	Not relevant
Hydrocarbons, C6, isoalkanes, <5% n-hexane CAS: 64742-49-0 EC: 931-254-9	Oral	Not relevant	Not relevant	Not relevant	Not relevant
	Dermal	Not relevant	Not relevant	13964 mg/kg	Not relevant
	Inhalation	Not relevant	Not relevant	5306 mg/m ³	Not relevant
Benzenesulfonic acid, mono-C16-24-alkyl derivs., calcium salts CAS: 70024-69-0 EC: 274-263-7	Oral	Not relevant	Not relevant	Not relevant	Not relevant
	Dermal	Not relevant	Not relevant	3,33 mg/kg	Not relevant
	Inhalation	Not relevant	Not relevant	11,75 mg/m ³	Not relevant
Benzenesulfonic acid, di-C10-14-alkyl derivs., calcium salts TBN < 300 CAS: Not relevant EC: 939-603-7	Oral	Not relevant	Not relevant	Not relevant	Not relevant
	Dermal	Not relevant	Not relevant	25 mg/kg	Not relevant
	Inhalation	Not relevant	Not relevant	35,26 mg/m ³	Not relevant

DNEL (General population):

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane CAS: Not relevant EC: 921-024-6	Oral	Not relevant	Not relevant	699 mg/kg	Not relevant
	Dermal	Not relevant	Not relevant	699 mg/kg	Not relevant
	Inhalation	Not relevant	Not relevant	608 mg/m ³	Not relevant
pentane CAS: 109-66-0 EC: 203-692-4	Oral	Not relevant	Not relevant	214 mg/kg	Not relevant
	Dermal	Not relevant	Not relevant	214 mg/kg	Not relevant
	Inhalation	Not relevant	Not relevant	643 mg/m ³	Not relevant
Hydrocarbons, C6, isoalkanes, <5% n-hexane CAS: 64742-49-0 EC: 931-254-9	Oral	Not relevant	Not relevant	1301 mg/kg	Not relevant
	Dermal	Not relevant	Not relevant	1377 mg/kg	Not relevant
	Inhalation	Not relevant	Not relevant	1131 mg/m ³	Not relevant
Benzenesulfonic acid, mono-C16-24-alkyl derivs., calcium salts CAS: 70024-69-0 EC: 274-263-7	Oral	Not relevant	Not relevant	0,833 mg/kg	Not relevant
	Dermal	Not relevant	Not relevant	1,667 mg/kg	Not relevant
	Inhalation	Not relevant	Not relevant	2,9 mg/m ³	Not relevant
Benzenesulfonic acid, di-C10-14-alkyl derivs., calcium salts TBN < 300 CAS: Not relevant EC: 939-603-7	Oral	Not relevant	Not relevant	2,5 mg/kg	Not relevant
	Dermal	Not relevant	Not relevant	12,5 mg/kg	Not relevant
	Inhalation	Not relevant	Not relevant	8,7 mg/m ³	Not relevant

PNEC:

Identification					
pentane CAS: 109-66-0 EC: 203-692-4	STP	3,6 mg/L	Fresh water	0,23 mg/L	
	Soil	0,55 mg/kg	Marine water	0,23 mg/L	
	Intermittent	0,88 mg/L	Sediment (Fresh water)	1,2 mg/kg	
	Oral	Not relevant	Sediment (Marine water)	1,2 mg/kg	
Benzenesulfonic acid, mono-C16-24-alkyl derivs., calcium salts CAS: 70024-69-0 EC: 274-263-7	STP	1000 mg/L	Fresh water	1 mg/L	
	Soil	271000000 mg/kg	Marine water	1 mg/L	
	Intermittent	10 mg/L	Sediment (Fresh water)	226000000 mg/kg	
	Oral	0,016667 g/kg	Sediment (Marine water)	226000000 mg/kg	

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

Identification					
Benzenesulfonic acid, di-C10-14-alkyl derivs., calcium salts TBN < 300 CAS: Not relevant EC: 939-603-7	STP	1000 mg/L	Fresh water	0,1 mg/L	
	Soil	36739,74 mg/kg	Marine water	0,1 mg/L	
	Intermittent	1 mg/L	Sediment (Fresh water)	45211 mg/kg	
	Oral	Not relevant	Sediment (Marine water)	45211 mg/kg	

8.2 Exposure controls:

A.- Individual protection measures, such as personal protective equipment

As a preventative measure it is recommended to use basic Personal Protective Equipment, with the corresponding <<CE marking>> in accordance with Regulation (EU) 2016/425. For more information on Personal Protective Equipment (storage, use, cleaning, maintenance, class of protection,...) consult the information leaflet provided by the manufacturer. For more information see subsection 7.1. All information contained herein is a recommendation which needs some specification from the labour risk prevention services as it is not known whether the company has additional measures at its disposal.

B.- Respiratory protection

If the working conditions and/or safety measures adopted do not allow keeping the airborne concentration of the product below the exposure limits (if any) or at acceptable levels (if no exposure limits exist), suitable respiratory protection equipment chosen by a qualified professional should be used.

C.- Specific protection for the hands

Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory hand protection	Protective gloves against minor risks	 CAT I		Replace gloves in case of any sign of damage. For prolonged periods of exposure to the product for professional users/industrials, we recommend using CE III gloves in line with standards EN ISO 21420:2020 and EN ISO 374-1:2016+A1:2018

As the product is a mixture of several substances, the resistance of the glove material can not be calculated in advance with total reliability and has therefore to be checked prior to the application.

D.- Eye and face protection

Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory face protection	Panoramic glasses against splash/projections.	 CAT II	EN ISO 16321-1:2022 + EN ISO 16321-3:2022 EN ISO 4007:2018	Clean daily and disinfect periodically according to the manufacturer's instructions. Use if there is a risk of splashing.

E.- Body protection

Pictogram	PPE	Labelling	CEN Standard	Remarks
	Work clothing	 CAT I		Replace before any evidence of deterioration. For periods of prolonged exposure to the product for professional/industrial users CE III is recommended, in accordance with the regulations in EN ISO 6529:2013, EN ISO 6530:2005, EN ISO 13688:2013, EN 464:1994.
	Anti-slip work shoes	 CAT II	EN ISO 20347:2022/A1:2024	Replace before any evidence of deterioration. For periods of prolonged exposure to the product for professional/industrial users CE III is recommended, in accordance with the regulations in EN ISO 20345:2022 y EN 13832-1:2019

It is advised to implement additional emergency equipments in workplaces that are particularly exposed to the product or in situations where risk assessments highlight the necessity of such equipments.

Environmental exposure controls:

To comply with environmental protection regulations, it is recommended to prevent any spillage of the product and its container. For more detailed information, please refer to subsection 7.1.D.

Volatile organic compounds:

With regard to Directive 2010/75/EU, this product has the following characteristics:

V.O.C. (Supply):	81 % weight
V.O.C. density at 20 °C:	Not relevant
Average carbon number:	6,44



SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

Average molecular weight: 91,04 g/mol

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties:

For complete information see the product datasheet.

Appearance:

Physical state at 20 °C:	Aerosol
Appearance:	Fluid
Colour:	Colourless
Odour:	Characteristic
Odour threshold:	Not relevant *

Volatility:

Boiling point at atmospheric pressure:	Not relevant *
Vapour pressure at 20 °C:	Not relevant *
Vapour pressure at 50 °C:	<300000 Pa (300 kPa)
Evaporation rate at 20 °C:	Not relevant *

Product description:

Density at 20 °C:	Not relevant *
Relative density at 20 °C:	Not relevant *
Dynamic viscosity at 20 °C:	Not relevant *
Kinematic viscosity at 20 °C:	Not relevant *
Kinematic viscosity at 40 °C:	Not relevant *
Concentration:	Not relevant *
pH:	Not relevant *
Relative vapour density at 20 °C:	Not relevant *
Partition coefficient n-octanol/water 20 °C:	Not relevant *
Solubility in water at 20 °C:	Not relevant *
Solubility properties:	Not relevant *
Decomposition temperature:	Not relevant *
Melting point/freezing point:	Not relevant *
Recipient pressure:	Not relevant *

Flammability:

Flash Point:	Not relevant *
Flammability (solid, gas):	Not relevant *
Autoignition temperature:	Not relevant *
Lower flammability limit:	Not relevant *
Upper flammability limit:	Not relevant *

Particle characteristics:

Median equivalent diameter:	Not relevant *
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9.2 Other information:

Information with regard to physical hazard classes:

Explosive properties:	Not relevant *
Oxidising properties:	Not relevant *
Corrosive to metals:	Not relevant *

*Not relevant due to the nature of the product, not providing information property of its hazards.

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SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES (continued)

Heat of combustion: Not relevant *

Aerosols-total percentage (by mass) of flammable components: Not relevant *

Other safety characteristics:

Surface tension at 20 °C: Not relevant *

Refraction index: Not relevant *

*Not relevant due to the nature of the product, not providing information property of its hazards.

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity:

No hazardous reactions are expected because the product is stable under recommended storage conditions. See section 7 from Safety Data Sheet.

10.2 Chemical stability:

Chemically stable under the indicated conditions of storage, handling and use.

10.3 Possibility of hazardous reactions:

Under the specified conditions, hazardous reactions that lead to excessive temperatures or pressure are not expected.

10.4 Conditions to avoid:

Applicable for handling and storage at room temperature:

Shock and friction	Contact with air	Increase in temperature	Sunlight	Humidity
Precaution	Precaution	Risk of combustion	Avoid direct impact	Not applicable

10.5 Incompatible materials:

Acids	Water	Oxidising materials	Combustible materials	Others
Avoid strong acids	Not applicable	Avoid direct impact	Not applicable	Avoid alkalis or strong bases

10.6 Hazardous decomposition products:

See subsection 10.3, 10.4 and 10.5 to find out the specific decomposition products. Depending on the decomposition conditions, complex mixtures of chemical substances can be released: carbon dioxide (CO₂), carbon monoxide and other organic compounds.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008:

The experimental information related to the toxicological properties of the product itself is not available

Dangerous health implications:

In case of exposure that is repetitive, prolonged or at concentrations higher than the recommended occupational exposure limits, adverse effects on health may result, depending on the means of exposure:

A- Ingestion (acute effect):

- Acute toxicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for consumption. For more information see section 3
- Corrosivity/Irritability: The consumption of a considerable dose can cause irritation in the throat, abdominal pain, nausea and vomiting.

B- Inhalation (acute effect):

- Acute toxicity : Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for inhalation. For more information see section 3.
- Corrosivity/Irritability: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

C- Contact with the skin and the eyes (acute effect):

- Contact with the skin: Produces skin inflammation.
- Contact with the eyes: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

D- CMR effects (carcinogenicity, mutagenicity and toxicity to reproduction):

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SECTION 11: TOXICOLOGICAL INFORMATION (continued)

- Carcinogenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for the effects mentioned. For more information see section 3.
- IARC: Hydrocarbons, C6, isoalkanes, <5% n-hexane (3: Not classifiable as to its carcinogenicity to humans); Distillates (petroleum), hydrotreated heavy naphthenic, < 3 % IP 346 (3: Not classifiable as to its carcinogenicity to humans)
- Mutagenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.
- Reproductive toxicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

E- Sensitizing effects:

- Respiratory: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous with sensitising effects. For more information see section 3.
- Skin: Based on available data, the classification criteria are not met. However, it contains substances classified as dangerous with sensitising effects. For more information see section 3.

F- Specific target organ toxicity (STOT) - single exposure:

Exposure in high concentration can interfere with the central nervous system causing headache, dizziness, vertigo, nausea, vomiting, confusion, and in serious cases, loss of consciousness.

G- Specific target organ toxicity (STOT)-repeated exposure:

- Specific target organ toxicity (STOT)-repeated exposure: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.
- Skin: Based on available data, the classification criteria are not met. However, it does contain substances which are classified as dangerous due to repetitive exposure. For more information see section 3.

H- Aspiration hazard:

Based on available data, the classification criteria are not met. However, it does contain substances classified as hazardous for this effect. For more information see section 3.

Other information:

Not relevant

Specific toxicology information on the substances:

Identification	Acute toxicity		Genus
Carbon dioxide CAS: 124-38-9 EC: 204-696-9	LD50 oral	>2000 mg/kg	
	LD50 dermal	>2000 mg/kg	
	LC50 inhalation gases	>20000 mg/L	
pentane CAS: 109-66-0 EC: 203-692-4	LD50 oral	>2000 mg/kg	
	LD50 dermal	>2000 mg/kg	
	LC50 inhalation vapour	>20 mg/L	
Hydrocarbons, C6, isoalkanes, <5% n-hexane CAS: 64742-49-0 EC: 931-254-9	LD50 oral	>2000 mg/kg	
	LD50 dermal	>2000 mg/kg	
	LC50 inhalation vapour	>20 mg/L	
Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane CAS: Not relevant EC: 921-024-6	LD50 oral	5840 mg/kg	Rat
	LD50 dermal	2920 mg/kg	Rat
	LC50 inhalation vapour	>20 mg/L	
Benzenesulfonic acid, mono-C16-24-alkyl derivs., calcium salts CAS: 70024-69-0 EC: 274-263-7	LD50 oral	16000 mg/kg	Rat
	LD50 dermal	>5000 mg/kg	Rabbit
	LC50 inhalation dust	>5 mg/L	
Benzenesulfonic acid, di-C10-14-alkyl derivs., calcium salts TBN < 300 CAS: Not relevant EC: 939-603-7	LD50 oral	10000 mg/kg	Rat
	LD50 dermal	>2000 mg/kg	
	LC50 inhalation vapour	>20 mg/L	

Only the physical form mist can occur during any reasonably expected use of the product, including when the product is used to produce a new product.

11.2 Information on other hazards:

Endocrine disrupting properties

Endocrine-disrupting properties: The product does not meet the criteria.

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SECTION 11: TOXICOLOGICAL INFORMATION (continued)

Other information

Not relevant

SECTION 12: ECOLOGICAL INFORMATION

The experimental information related to the eco-toxicological properties of the product itself is not available

Toxic to aquatic life with long lasting effects.

12.1 Toxicity:

Acute toxicity:

Identification	Concentration		Species	Genus
Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane CAS: Not relevant EC: 921-024-6	LC50	5,1 mg/L (96 h)	Oncorhynchus mykiss	Fish
	EC50	Not relevant		
	EC50	Not relevant		
pentane CAS: 109-66-0 EC: 203-692-4	LC50	Not relevant		
	EC50	9,74 mg/L (48 h)	Daphnia magna	Crustacean
	EC50	Not relevant		
Hydrocarbons, C6, isoalkanes, <5% n-hexane CAS: 64742-49-0 EC: 931-254-9	LC50	Not relevant		
	EC50	3,87 mg/L (48 h)	Daphnia magna	Crustacean
	EC50	55 mg/L (72 h)	Scenedesmus subspicatus	Algae

Chronic toxicity:

Identification	Concentration		Species	Genus
Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane CAS: Not relevant EC: 921-024-6	NOEC	Not relevant		
	NOEC	0,17 mg/L	Daphnia magna	Crustacean

12.2 Persistence and degradability:

Substance-specific information:

Identification	Degradability		Biodegradability	
Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane CAS: Not relevant EC: 921-024-6	BOD5	Not relevant	Concentration	Not relevant
	COD	Not relevant	Period	28 days
	BOD5/COD	Not relevant	% Biodegradable	98 %
pentane CAS: 109-66-0 EC: 203-692-4	BOD5	Not relevant	Concentration	100 mg/L
	COD	Not relevant	Period	28 days
	BOD5/COD	Not relevant	% Biodegradable	96 %
Hydrocarbons, C6, isoalkanes, <5% n-hexane CAS: 64742-49-0 EC: 931-254-9	BOD5	Not relevant	Concentration	100 mg/L
	COD	Not relevant	Period	28 days
	BOD5/COD	Not relevant	% Biodegradable	98 %

12.3 Bioaccumulative potential:

Substance-specific information:

Identification	Bioaccumulation potential	
pentane CAS: 109-66-0 EC: 203-692-4	BCF	171
	Pow Log	3.39
	Potential	High
Hydrocarbons, C6, isoalkanes, <5% n-hexane CAS: 64742-49-0 EC: 931-254-9	BCF	501
	Pow Log	3.6
	Potential	High

12.4 Mobility in soil:

Identification	Absorption/desorption		Volatility	
pentane CAS: 109-66-0 EC: 203-692-4	Koc	80	Henry	126656,25 Pa·m ³ /mol
	Conclusion	Very High	Dry soil	Yes
	Surface tension	1,547E-2 N/m (25 °C)	Moist soil	Yes

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SECTION 12: ECOLOGICAL INFORMATION (continued)

Identification	Absorption/desorption		Volatility	
Carbon dioxide	Koc	Not relevant	Henry	Not relevant
CAS: 124-38-9	Conclusion	Not relevant	Dry soil	Not relevant
EC: 204-696-9	Surface tension	5,7E-4 N/m (25 °C)	Moist soil	Not relevant

12.5 Results of PBT and vPvB assessment:

Product does not meet PBT/vPvB criteria

12.6 Endocrine disrupting properties:

Endocrine-disrupting properties: The product does not meet the criteria.

12.7 Other adverse effects:

Not described

SECTION 13: DISPOSAL CONSIDERATIONS
13.1 Waste treatment methods:

Code	Description	Waste class (Regulation (EU) No 1357/2014)
16 05 04*	gases in pressure containers (including halons) containing hazardous substances	Hazardous

Type of waste (Regulation (EU) No 1357/2014):

HP14 Ecotoxic, HP3 Flammable, HP5 Specific Target Organ Toxicity (STOT)/Aspiration Toxicity, HP4 Irritant — skin irritation and eye damage

Waste management (disposal and evaluation):

Consult the authorized waste service manager on the assessment and disposal operations in accordance with Annex 1 and Annex 2 (Directive 2008/98/EC). As under 15 01 (2014/955/EC) of the code and in case the container has been in direct contact with the product, it will be processed the same way as the actual product. Otherwise, it will be processed as non-hazardous residue. Waste should not be disposed of to drains. See paragraph 6.2.

Regulations related to waste management:

In accordance with Annex II of Regulation (EC) No 1907/2006 (REACH) the community or state provisions related to waste management are stated

Community legislation: Directive 2008/98/EC, 2014/955/EU, Regulation (EU) No 1357/2014

SECTION 14: TRANSPORT INFORMATION **
Transport of dangerous goods by land:

With regard to ADR 2025 and RID 2025:



- 14.1 UN number or ID number:** UN1950
- 14.2 UN proper shipping name:** AEROSOLS
- 14.3 Transport hazard class(es):** 2
- Labels: 2.1
- 14.4 Packing group:** N/A
- 14.5 Environmental hazards:** Yes
- 14.6 Special precautions for user**
- Special regulations: 190, 327, 344, 625
- Tunnel restriction code: D
- Physico-Chemical properties: see section 9
- Limited quantities: 1 L
- 14.7 Maritime transport in bulk according to IMO instruments:** Not relevant

Transport of dangerous goods by sea:

With regard to IMDG 42-24:

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SECTION 14: TRANSPORT INFORMATION ** (continued)

	14.1 UN number or ID number:	UN1950
	14.2 UN proper shipping name:	AEROSOLS
	14.3 Transport hazard class(es):	2
	Labels:	2.1
	14.4 Packing group:	N/A
	14.5 Marine pollutant:	Yes
	14.6 Special precautions for user	
	Special regulations:	63, 959, 190, 277, 327, 344
	EmS Codes:	F-D, S-U
	Physico-Chemical properties:	see section 9
	Limited quantities:	1 L
	Segregation group:	Not relevant
	14.7 Maritime transport in bulk according to IMO instruments:	Not relevant

Transport of dangerous goods by air:

With regard to IATA/ICAO 2026:

	14.1 UN number or ID number:	UN1950
	14.2 UN proper shipping name:	AEROSOLS, flammable
	14.3 Transport hazard class(es):	2
	Labels:	2.1
	14.4 Packing group:	N/A
	14.5 Environmental hazards:	Yes
	14.6 Special precautions for user	
	Physico-Chemical properties:	see section 9
	14.7 Maritime transport in bulk according to IMO instruments:	Not relevant

** Changes with regards to the previous version

SECTION 15: REGULATORY INFORMATION

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

- Article 95, REGULATION (EU) No 528/2012: *Carbon dioxide (124-38-9) - PT: (NA)*
- Candidate substances for authorisation under the Regulation (EC) No 1907/2006 (REACH): Not relevant
- Regulation (EU) 2019/1021 on persistent organic pollutants: Not relevant
- Regulation (EU) No 2024/590, about substances that deplete the ozone layer: Not relevant
- REGULATION (EU) No 649/2012, in relation to the import and export of hazardous chemical products: *Hydrocarbons, C6, isoalkanes, <5% n-hexane (64742-49-0)*
- Substances included in Annex XIV of REACH ("Authorisation List") and sunset date: Not relevant

Regulation (EC) No 648/2004 on detergents:

In accordance with this regulation the product complies with the following:

The tensoactives contained in this mixture comply with the biodegradability criteria stipulated in Regulation (EC) n°648/2004 on detergents. The information to prove this is available to the relevant authorities of the Member States and will be shown to them by direct request or the request of a detergent manufacturer.

Labelling for contents:

Component	Concentration interval
Aliphatic hydrocarbons	% (w/w) >= 30
Aromatic hydrocarbons	5 <= % (w/w) < 15
Anionic surfactants	% (w/w) < 5

Seveso III:

Section	Description	Lower-tier requirements	Upper-tier requirements
P3b	FLAMMABLE AEROSOLS	5000.000	50000.000
E2	ENVIRONMENTAL HAZARDS	200.000	500.000

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SECTION 15: REGULATORY INFORMATION (continued)

Limitations to commercialisation and the use of certain dangerous substances and mixtures (Annex XVII REACH, etc):

Shall not be used in:

- ornamental articles intended to produce light or colour effects by means of different phases, for example in ornamental lamps and ashtrays,
- tricks and jokes,
- games for one or more participants, or any article intended to be used as such, even with ornamental aspects.

Specific provisions in terms of protecting people or the environment:

It is recommended to use the information included in this safety data sheet as a basis for conducting workplace-specific risk assessments in order to establish the necessary risk prevention measures for the handling, use, storage and disposal of this product.

Other legislation:

The product could be affected by sectorial legislation

Regulation (EC) No 1223/2009 of the European Parliament and of the Council of 30 November 2009 on cosmetic products

Regulation (EC) No 648/2004 of the European Parliament and of the Council of 31 March 2004 on detergents

Commission Regulation (EC) No 907/2006 of 20 June 2006 amending Regulation (EC) No 648/2004 of the European Parliament and of the Council on detergents, in order to adapt Annexes III and VII

Commission Regulation (EC) No 551/2009 of 25 June 2009 amending Regulation (EC) No 648/2004 of the European Parliament and of the Council on detergents, in order to adapt Annexes V and VI thereto (surfactant derogation)

Council Directive 75/324/EEC of 20 May 1975 on the approximation of the laws of the Member States relating to aerosol dispensers

Commission Directive 94/1/EC of 6 January 1994 adapting some technicalities of Council Directive 75/324/EEC on the approximation of the laws of the relating Member States to aerosol dispensers

Commission Directive 2008/47/EC of 8 April 2008 amending, for the purposes of adapting to technical progress, Council Directive 75/324/EEC on the approximation of the laws of the Member States relating to aerosol dispensers

Commission Directive 2013/10/EU of 19 March 2013 amending Council Directive 75/324/EEC on the approximation of the laws of the Member States relating to aerosol dispensers in order to adapt its labelling provisions to Regulation (EC) No 1272/2008 of the European Parliament and of the Council on classification, labelling and packaging of substances and mixtures

COMMISSION DIRECTIVE (EU) 2016/2037 of 21 November 2016 amending Council Directive 75/324/EEC as regards the maximum allowable pressure of aerosol dispensers and to adapt its labelling provisions to Regulation (EC) No 1272/2008 of the European Parliament and of the Council on classification, labelling and packaging of substances and mixtures

15.2 Chemical safety assessment:

The supplier has not carried out evaluation of chemical safety.

SECTION 16: OTHER INFORMATION

Legislation related to safety data sheets:

The SDS shall be supplied in an official language of the country where the product is placed on the market. This safety data sheet has been designed in accordance with ANNEX II-Guide to the compilation of safety data sheets of Regulation (EC) No 1907/2006 (COMMISSION REGULATION (EU) 2020/878).

Modifications related to the previous Safety Data Sheet which concerns the ways of managing risks.:

TRANSPORT INFORMATION (SECTION 14):

- UN number
- Packing group

Texts of the legislative phrases mentioned in section 2:

H336: May cause drowsiness or dizziness.

H411: Toxic to aquatic life with long lasting effects.

H315: Causes skin irritation.

H222: Extremely flammable aerosol.

H229: Pressurised container: May burst if heated.

Texts of the legislative phrases mentioned in section 3:

The phrases indicated do not refer to the product itself; they are present merely for informative purposes and refer to the individual components which appear in section 3

CLP Regulation (EC) No 1272/2008:



SECTION 16: OTHER INFORMATION (continued)

Aquatic Chronic 2: H411 - Toxic to aquatic life with long lasting effects.
 Asp. Tox. 1: H304 - May be fatal if swallowed and enters airways.
 Flam. Liq. 2: H225 - Highly flammable liquid and vapour.
 Press. Gas: H280 - Contains gas under pressure, may explode if heated.
 Skin Irrit. 2: H315 - Causes skin irritation.
 Skin Sens. 1B: H317 - May cause an allergic skin reaction.
 STOT SE 3: H336 - May cause drowsiness or dizziness.

Classification procedure:

STOT SE 3: Calculation method
 Aquatic Chronic 2: Calculation method
 Skin Irrit. 2: Calculation method
 Aerosol 1: Calculation method
 Aerosol 1: Calculation method

Advice related to training:

Training is recommended in order to prevent industrial risks for staff using this product and to facilitate their comprehension and interpretation of this safety data sheet, as well as the label on the product.

Principal bibliographical sources:

<http://echa.europa.eu>
<http://eur-lex.europa.eu>

Abbreviations and acronyms:

ADR: European agreement concerning the international carriage of dangerous goods by road
 IMDG: International maritime dangerous goods code
 IATA: International Air Transport Association
 ICAO: International Civil Aviation Organisation
 COD: Chemical Oxygen Demand
 BOD5: 5day biochemical oxygen demand
 BCF: Bioconcentration factor
 LD50: Lethal Dose 50
 LC50: Lethal Concentration 50
 EC50: Effective concentration 50
 LogPOW: Octanolwater partition coefficient
 Koc: Partition coefficient of organic carbon
 UFI: unique formula identifier
 IARC: International Agency for Research on Cancer

The information contained in this safety data sheet is based on sources, technical knowledge and current legislation at European and state level, without being able to guarantee its accuracy. This information cannot be considered a guarantee of the properties of the product, it is simply a description of the security requirements. The occupational methodology and conditions for users of this product are not within our awareness or control, and it is ultimately the responsibility of the user to take the necessary measures to obtain the legal requirements concerning the manipulation, storage, use and disposal of chemical products. The information on this safety data sheet only refers to this product, which should not be used for needs other than those specified.

- END OF SAFETY DATA SHEET -