

**SMAR PTFE - PTFE GREASE****SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING**

- 1.1 Product identifier:** SMAR PTFE - PTFE GREASE
- 1.2 Relevant identified uses of the substance or mixture and uses advised against:**
Relevant uses: Multipurpose lubricant in aerosol.
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:**
Agencja Handlowa "BOLL" Wojciech Dalewski Spółka Jawna
ul. Chemiczna 3
65-713 Zielona Góra - Polska
Phone.: 68 451 99 99 - Fax: 68 451 99 00
technolog@boll.pl
- 1.4 Emergency telephone number:**

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:**
H222 - Extremely flammable aerosol.
H229 - Pressurised container: May burst if heated.
H315 - Causes skin irritation.
H336 - May cause drowsiness or dizziness.
H411 - Toxic to aquatic life with long lasting effects.
- 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
P260: Do not breathe spray
P271: Use only outdoors or in a well-ventilated area
P273: Avoid release to the environment
P280: Wear protective gloves/eye protection
P301+P312: IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell
P331: Do NOT induce vomiting
P403: Store in a well-ventilated place
P410+P412: Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122°F
P501: Dispose of contents/container in accordance with regulations on hazardous waste or packaging and packaging waste respectively
- Substances that contribute to the classification**
Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane

** Changes with regards to the previous version

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SMAR PTFE - PTFE GREASE

SECTION 2: HAZARDS IDENTIFICATION ** (continued)

2.3 Other hazards:

Product fails to meet PBT/vPvB criteria

** Changes with regards to the previous version

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS **

3.1 Substance:

Non-applicable

3.2 Mixture:

Chemical description: active ingredient mixture with a propellant. Propellant: propane - butane

Components:

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

| Identification | Chemical name/Classification | Concentration |
|---|---|---------------|
| CAS: 8042-47-5 EC: 232-455-8 Index: Non-applicable REACH: 01-2119487078-27-XXXX | White mineral oil, >=20.5mm2/s (40°C)⁽¹⁾ Not classified Regulation 1272/2008 | 25 - <50 % |
| CAS: Non-applicable EC: 921-024-6 Index: Non-applicable REACH: 01-2119475514-35-XXXX | Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane⁽¹⁾ Self-classified Regulation 1272/2008 Aquatic Chronic 2: H411; Asp. Tox. 1: H304; Flam. Liq. 2: H225; Skin Irrit. 2: H315; STOT SE 3: H336 - Danger | 25 - <50 % |
| CAS: 106-97-8 EC: 203-448-7 Index: 601-004-00-0 REACH: 01-2119474691-32-XXXX | Butane⁽¹⁾ ATP CLP00 Regulation 1272/2008 Flam. Gas 1A: H220; Press. Gas: H280 - Danger | 10 - <25 % |
| CAS: 74-98-6 EC: 200-827-9 Index: 601-003-00-5 REACH: 01-2119486944-21-XXXX | Propane⁽¹⁾ ATP CLP00 Regulation 1272/2008 Flam. Gas 1A: H220; Press. Gas: H280 - Danger | 2,5 - <10 % |
| CAS: 75-28-5 EC: 200-857-2 Index: 601-004-00-0 REACH: 01-2119485395-27-XXXX | Isobutane⁽¹⁾ ATP CLP00 Regulation 1272/2008 Flam. Gas 1A: H220; Press. Gas: H280 - Danger | 1 - <2,5 % |

⁽¹⁾ Voluntarily-listed substance failing to meet any of the criteria set out in Regulation (EU) No. 2015/830

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

** Changes with regards to the previous version

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.

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:

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**SMAR PTFE - PTFE GREASE****SECTION 4: FIRST AID MEASURES (continued)**

Rinse eyes thoroughly with lukewarm water for at least 15 minutes. Do not allow the person affected to rub or close their eyes. If the injured person uses contact lenses, these should be removed unless they are stuck to the eyes, in which case this could cause further damage. In all cases, after cleaning, a doctor should be consulted as quickly as possible with the SDS of 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:

Non-applicable

SECTION 5: FIREFIGHTING MEASURES**5.1 Extinguishing media:**

If possible use polyvalent powder fire extinguishers (ABC powder), alternatively use foam or carbon dioxide extinguishers (CO₂). IT IS RECOMMENDED NOT to use full jet water as an extinguishing agent.

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/EC.

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:**

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. Destroy 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.

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:

Absorb the spillage using sand or inert absorbent and move it to a safe place. Do not absorb in sawdust or other combustible absorbents. For any concern related to disposal consult section 13.

6.4 Reference to other sections:

See sections 8 and 13.

SECTION 7: HANDLING AND STORAGE**7.1 Precautions for safe handling:**

A.- Precautions for safe manipulation

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**SMAR PTFE - PTFE GREASE****SECTION 7: HANDLING AND STORAGE (continued)**

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. Avoid splashes and pulverizations. Consult section 10 for conditions and materials that should be avoided.

C.- Technical recommendations to prevent ergonomic and toxicological risks

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.- Technical measures for storage**

| | |
|----------------|-----------|
| Minimum Temp.: | 5 °C |
| Maximum Temp.: | 20 °C |
| Maximum time: | 24 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):

There are no occupational exposure limits for the substances contained in the product

DNEL (Workers):

| Identification | | Short exposure | | Long exposure | |
|---|------------|----------------|----------------|--------------------------|----------------|
| | | Systemic | Local | Systemic | Local |
| White mineral oil, >=20.5mm2/s (40°C) CAS: 8042-47-5 EC: 232-455-8 | Oral | Non-applicable | Non-applicable | Non-applicable | Non-applicable |
| | Dermal | Non-applicable | Non-applicable | 217,05 mg/kg | Non-applicable |
| | Inhalation | Non-applicable | Non-applicable | 164,56 mg/m ³ | Non-applicable |
| Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane CAS: Non-applicable EC: 921-024-6 | Oral | Non-applicable | Non-applicable | Non-applicable | Non-applicable |
| | Dermal | Non-applicable | Non-applicable | 773 mg/kg | Non-applicable |
| | Inhalation | Non-applicable | Non-applicable | 2035 mg/m ³ | Non-applicable |

DNEL (General population):

| Identification | | Short exposure | | Long exposure | |
|---|------------|----------------|----------------|-------------------------|----------------|
| | | Systemic | Local | Systemic | Local |
| White mineral oil, >=20.5mm2/s (40°C) CAS: 8042-47-5 EC: 232-455-8 | Oral | Non-applicable | Non-applicable | 25 mg/kg | Non-applicable |
| | Dermal | Non-applicable | Non-applicable | 93,02 mg/kg | Non-applicable |
| | Inhalation | Non-applicable | Non-applicable | 34,78 mg/m ³ | Non-applicable |
| Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane CAS: Non-applicable EC: 921-024-6 | Oral | Non-applicable | Non-applicable | 699 mg/kg | Non-applicable |
| | Dermal | Non-applicable | Non-applicable | 699 mg/kg | Non-applicable |
| | Inhalation | Non-applicable | Non-applicable | 608 mg/m ³ | Non-applicable |

PNEC:

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

Non-applicable



8.2 Exposure controls:

A.- General security and hygiene measures in the work place



As a preventative measure it is recommended to use basic Personal Protective Equipment, with the corresponding <<CE marking>> in accordance with Directive 89/686/EC. 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



| Pictogram | PPE | Labelling | CEN Standard | Remarks |
|---|--|---|--|---|
|  Mandatory respiratory tract protection | Filter mask for gases, vapours and particles |  | EN 149:2001+A1:2009 EN 405:2002+A1:2010 | Replace when an increase in resistance to breathing is observed and/or a smell or taste of the contaminant is detected. |

C.- Specific protection for the hands





| Pictogram | PPE | Labelling | CEN Standard | Remarks |
|---|---------------------------------------|--|--------------|--|
|  Mandatory hand protection | Protective gloves against minor risks |  | | 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 420:2004+A1:2010 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 predicted in advance with total reliability and has therefore to be checked prior to the application"



D.- Ocular and facial protection

| Pictogram | PPE | Labelling | CEN Standard | Remarks |
|--|---|---|---------------------------------|---|
|  Mandatory face protection | Panoramic glasses against splash/projections. |  | EN 166:2002 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 |
|---|---|---|--|---|
|  Mandatory complete body protection | Antistatic and fireproof protective clothing |  | EN 1149-1:2006 EN 1149-2:1997 EN 1149-3:2004 EN 168:2002 EN ISO 14116:2015 EN 1149-5:2018 | Limited protection against flames. |
|  Mandatory foot protection | Safety footwear with antistatic and heat resistant properties |  | EN ISO 13287:2013 EN ISO 20345:2011 | Replace boots at any sign of deterioration. |

F.- Additional emergency measures

| Emergency measure | Standards | Emergency measure | Standards |
|---|---|--|--|
|  Emergency shower | ANSI Z358-1 ISO 3864-1:2011, ISO 3864-4:2011 |  Eyewash stations | DIN 12 899 ISO 3864-1:2011, ISO 3864-4:2011 |

Environmental exposure controls:

In accordance with the community legislation for the protection of the environment it is recommended to avoid environmental spillage of both the product and its container. For additional information see subsection 7.1.D

Volatile organic compounds:

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**SMAR PTFE - PTFE GREASE****SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)**

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

| | |
|---------------------------|-------------------------------------|
| V.O.C. (Supply): | 60 % weight |
| V.O.C. density at 20 °C: | 433,2 kg/m ³ (433,2 g/L) |
| Average carbon number: | 7 |
| Average molecular weight: | 98 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: | Emulsion |
| Colour: | <input type="checkbox"/> White |
| Odour: | Characteristic |
| Odour threshold: | Non-applicable * |

Volatility:

| | |
|--|---------------------|
| Boiling point at atmospheric pressure: | -44 °C (Propellant) |
| Vapour pressure at 20 °C: | 830000 Pa |
| Vapour pressure at 50 °C: | Non-applicable * |
| Evaporation rate at 20 °C: | Non-applicable * |

Product description:

| | |
|--|-----------------------|
| Density at 20 °C: | 722 kg/m ³ |
| Relative density at 20 °C: | 0,722 |
| Dynamic viscosity at 20 °C: | Non-applicable * |
| Kinematic viscosity at 20 °C: | Non-applicable * |
| Kinematic viscosity at 40 °C: | Non-applicable * |
| Concentration: | Non-applicable * |
| pH: | Non-applicable * |
| Vapour density at 20 °C: | Non-applicable * |
| Partition coefficient n-octanol/water 20 °C: | Non-applicable * |
| Solubility in water at 20 °C: | Non-applicable * |
| Solubility properties: | Insoluble in water |
| Decomposition temperature: | Non-applicable * |
| Melting point/freezing point: | Non-applicable * |
| Recipient pressure: | Non-applicable * |
| Explosive properties: | Non-applicable * |
| Oxidising properties: | Non-applicable * |

Flammability:

| | |
|----------------------------|---------------------|
| Flash Point: | -97 °C (Propellant) |
| Flammability (solid, gas): | Non-applicable * |
| Autoignition temperature: | Non-applicable * |
| Lower flammability limit: | 0,8 % Volume |
| Upper flammability limit: | 10,9 % Volume |

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

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**SMAR PTFE - PTFE GREASE****SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES (continued)****Explosive:**

Lower explosive limit: Non-applicable *

Upper explosive limit: Non-applicable *

9.2 Other information:

Surface tension at 20 °C: Non-applicable *

Refraction index: Non-applicable *

*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.

10.2 Chemical stability:

Chemically stable under the 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 |
|--------------------|------------------|-------------------------|---------------------|----------------|
| Not applicable | Not applicable | 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 toxicological effects:**

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 dangerous 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 dangerous 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 dangerous for this effect. For more information see section 3.

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

** Changes with regards to the previous version

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SECTION 11: TOXICOLOGICAL INFORMATION ** (continued)

- 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 dangerous for this effect. For more information see section 3.
- D- CMR effects (carcinogenicity, mutagenicity and toxicity to reproduction):
 - Carcinogenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for the effects mentioned. For more information see section 3.
IARC: Non-applicable
 - Mutagenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous 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 dangerous 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 dangerous with sensitising effects. For more information see section 3.
 - Cutaneous: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. 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 dangerous for this effect. For more information see section 3.
 - Skin: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. 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 dangerous for this effect. For more information see section 3.

Other information:

Non-applicable

Specific toxicology information on the substances:

| Identification | Acute toxicity | | Genus |
|---|-----------------|----------------|-------|
| Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane CAS: Non-applicable EC: 921-024-6 | LD50 oral | 5840 mg/kg | Rat |
| | LD50 dermal | 2920 mg/kg | Rat |
| | LC50 inhalation | >20 mg/L (4 h) | |
| Butane CAS: 106-97-8 EC: 203-448-7 | LD50 oral | >2000 mg/kg | |
| | LD50 dermal | >2000 mg/kg | |
| | LC50 inhalation | 658 mg/L (4 h) | Rat |
| Propane CAS: 74-98-6 EC: 200-827-9 | LD50 oral | >2000 mg/kg | |
| | LD50 dermal | >2000 mg/kg | |
| | LC50 inhalation | >5 mg/L (4 h) | |
| White mineral oil, >=20.5mm ² /s (40°C) CAS: 8042-47-5 EC: 232-455-8 | LD50 oral | 5100 mg/kg | Rat |
| | LD50 dermal | >2000 mg/kg | |
| | LC50 inhalation | >5 mg/L (4 h) | |
| Isobutane CAS: 75-28-5 EC: 200-857-2 | LD50 oral | >2000 mg/kg | |
| | LD50 dermal | >2000 mg/kg | |
| | LC50 inhalation | >5 mg/L (4 h) | |

** Changes with regards to the previous version

SECTION 12: ECOLOGICAL INFORMATION **

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

** Changes with regards to the previous version

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SECTION 12: ECOLOGICAL INFORMATION ** (continued)

12.1 Toxicity:

| Identification | Acute toxicity | | Species | Genus |
|---|----------------|-----------------|---------------------|-------|
| Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane CAS: Non-applicable EC: 921-024-6 | LC50 | 5.1 mg/L (96 h) | Oncorhynchus mykiss | Fish |
| | EC50 | Non-applicable | | |
| | EC50 | Non-applicable | | |

12.2 Persistence and degradability:

| Identification | Degradability | | Biodegradability | |
|---|---------------|----------------|------------------|----------------|
| Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane CAS: Non-applicable EC: 921-024-6 | BOD5 | Non-applicable | Concentration | Non-applicable |
| | COD | Non-applicable | Period | 28 days |
| | BOD5/COD | Non-applicable | % Biodegradable | 98 % |

12.3 Bioaccumulative potential:

| Identification | Bioaccumulation potential | |
|--|---------------------------|----------|
| Butane CAS: 106-97-8 EC: 203-448-7 | BCF | 33 |
| | Pow Log | 2.89 |
| | Potential | Moderate |
| Propane CAS: 74-98-6 EC: 200-827-9 | BCF | 13 |
| | Pow Log | 2.86 |
| | Potential | Low |
| Isobutane CAS: 75-28-5 EC: 200-857-2 | BCF | 27 |
| | Pow Log | 2.76 |
| | Potential | Low |

12.4 Mobility in soil:

| Identification | Absorption/desorption | | Volatility | |
|--|-----------------------|----------------------|------------|----------------------------------|
| Butane CAS: 106-97-8 EC: 203-448-7 | Koc | 900 | Henry | 96258,75 Pa·m ³ /mol |
| | Conclusion | Low | Dry soil | Yes |
| | Surface tension | 1,187E-2 N/m (25 °C) | Moist soil | Yes |
| Propane CAS: 74-98-6 EC: 200-827-9 | Koc | 460 | Henry | 71636,78 Pa·m ³ /mol |
| | Conclusion | Moderate | Dry soil | Yes |
| | Surface tension | 7,02E-3 N/m (25 °C) | Moist soil | Yes |
| Isobutane CAS: 75-28-5 EC: 200-857-2 | Koc | 35 | Henry | 120576,75 Pa·m ³ /mol |
| | Conclusion | Very High | Dry soil | Yes |
| | Surface tension | 9,84E-3 N/m (25 °C) | Moist soil | Yes |

12.5 Results of PBT and vPvB assessment:

Product fails to meet PBT/vPvB criteria

12.6 Other adverse effects:

Not described

** Changes with regards to the previous version

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 | Dangerous |

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

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

Waste management (disposal and evaluation):

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SECTION 13: DISPOSAL CONSIDERATIONS (continued)

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-dangerous residue. We do not recommend disposal down the drain. 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 2019 and RID 2019:

| | | | |
|---|---|---|---------------------|
|  |  | 14.1 UN 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 | |
| | | Special regulations: | 190, 327, 344, 625 |
| | | Tunnel restriction code: | D |
| | | Physico-Chemical properties: | see section 9 |
| | | Limited quantities: | 1 L |
| | | 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code: | Non-applicable |

Transport of dangerous goods by sea:

With regard to IMDG 39-18:

| | | | |
|---|---|---|-----------------------------|
|  |  | 14.1 UN 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 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: | Non-applicable |
| | | 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code: | Non-applicable |

Transport of dangerous goods by air:

With regard to IATA/ICAO 2020:

- CONTINUED ON NEXT PAGE -



Safety data sheet

This SDS is an English translation of Regulation (EU) n° 2015/830, without any country-specific legislation

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SECTION 14: TRANSPORT INFORMATION (continued)



- 14.1 UN 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 Transport in bulk according to Annex II of Marpol and the IBC Code: Non-applicable

SECTION 15: REGULATORY INFORMATION

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

Candidate substances for authorisation under the Regulation (EC) No 1907/2006 (REACH): Non-applicable

Substances included in Annex XIV of REACH ("Authorisation List") and sunset date: Non-applicable

Regulation (EC) No 1005/2009, about substances that deplete the ozone layer: Non-applicable

Article 95, REGULATION (EU) No 528/2012: Non-applicable

REGULATION (EU) No 649/2012, in relation to the import and export of hazardous chemical products: Non-applicable

Seveso III:

| Section | Description | Lower-tier requirements | Upper-tier requirements |
|---------|-----------------------|-------------------------|-------------------------|
| P3a | FLAMMABLE AEROSOLS | 150 | 500 |
| E2 | ENVIRONMENTAL HAZARDS | 200 | 500 |

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

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.

- CONTINUED ON NEXT PAGE -

**SMAR PTFE - PTFE GREASE****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 (Regulation (EC) No 2015/830).

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

COMPOSITION/INFORMATION ON INGREDIENTS (SECTION 3, SECTION 11, SECTION 12):

- New declared substances
 - White mineral oil, >=20.5mm²/s (40°C) (8042-47-5)
 - Isobutane (75-28-5)

CLP Regulation (EC) No 1272/2008 (SECTION 2, SECTION 16):

- Precautionary statements

Texts of the legislative phrases mentioned in section 2:

H222: Extremely flammable aerosol
H315: Causes skin irritation
H336: May cause drowsiness or dizziness
H411: Toxic to aquatic life with long lasting effects
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:

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. Gas 1A: H220 - Extremely flammable gas
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
STOT SE 3: H336 - May cause drowsiness or dizziness

Classification procedure:

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

Advice related to training:

Minimal 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: 5-day biochemical oxygen demand
BCF: Bioconcentration factor
LD50: Lethal Dose 50
LC50: Lethal Concentration 50
EC50: Effective concentration 50
Log-POW: Octanol-water partition coefficient
Koc: Partition coefficient of organic carbon

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 -