

## Safety data sheet


This SDS is an English translation of COMMISSION REGULATION (EU) 2020/878, without any country-specific legislation

## Standard Gunfoam

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

- 1.1 Product identifier:** Standard Gunfoam
- Other means of identification:**  
Non-applicable
- 1.2 Relevant identified uses of the substance or mixture and uses advised against:**  
Relevant uses: Foam  
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:**  
Wolf Group OÜ  
Suur-Paala 10  
13619 Tallinn - Estonia  
Phone: +372 605 9300 - Fax: +372 605 9315  
sds@wolf-group.com  
www.wolf-group.com
- 1.4 Emergency telephone number:** 112

## 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 4: Hazardous to the aquatic environment, long-term hazard, Category 4, H413  
Carc. 2: Carcinogenicity, Category 2, H351  
Eye Irrit. 2: Eye irritation, Category 2, H319  
Lact.: Reproductive toxicity, effects on or via lactation, H362  
Resp. Sens. 1: Sensitisation, respiratory, Category 1, H334  
Skin Irrit. 2: Skin irritation, Category 2, H315  
Skin Sens. 1: Sensitisation, skin, Category 1, H317  
STOT RE 2: Specific target organ toxicity — Repeated exposure, Hazard Category 2, H373  
STOT SE 3: Respiratory tract toxicity, single exposure, Category 3, H335
- 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.  
H317 - May cause an allergic skin reaction.  
H319 - Causes serious eye irritation.  
H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
H335 - May cause respiratory irritation.  
H351 - Suspected of causing cancer.  
H362 - May cause harm to breast-fed children.  
H373 - May cause damage to organs through prolonged or repeated exposure.  
H413 - May cause long lasting harmful effects to aquatic life.
- Precautionary statements:**

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## SECTION 2: HAZARDS IDENTIFICATION (continued)

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.  
 P271: Use only outdoors or in a well-ventilated area.  
 P280: Wear protective gloves/face protection/protective clothing/respiratory protection/protective footwear.  
 P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
 P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
 P410+P412: Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122°F  
 P501: Dispose of the contents/containers in accordance with the current legislation on waste treatment

**Supplementary information:**

EUH204: Contains isocyanates. May produce an allergic reaction.

**Substances that contribute to the classification**

4,4'-methylenediphenyl diisocyanate, isomers and homologues; alkanes, C14-17, chloro

**Additional Labelling:**

As from 24 August 2023 adequate training is required before industrial or professional use.  
 Persons already sensitised to diisocyanates may develop allergic reactions when using this product.  
 Persons suffering from asthma, eczema or skin problems should avoid contact, including dermal contact, with this product.  
 This product should not be used under conditions of poor ventilation unless a protective mask with an appropriate gas filter (i.e. type A1 according to standard EN 14387) is used.

**2.3 Other hazards:**

Product contains PBT/vPvB substances: alkanes, C14-17, chloro  
 Endocrine-disrupting properties: The product fails to meet the criteria.

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

**3.1 Substance:**

Non-applicable

**3.2 Mixture:**

**Chemical description:** Mixture composed of organic substances

**Components:**

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

| Identification  | Chemical name/Classification   | Concentration            |
|---|--|--------------------------|
| CAS: 9016-87-9<br>EC: 618-498-9<br>Index: Non-applicable<br>REACH: Non-applicable       | <b>4,4'-methylenediphenyl diisocyanate, isomers and homologues</b> <input type="checkbox"/> <sup>1</sup> <input type="checkbox"/><br>Regulation 1272/2008 Acute Tox. 4: H332; Carc. 2: H351; Eye Irrit. 2: H319; Resp. Sens. 1: H334; Skin Irrit. 2: H315; Skin Sens. 1: H317; STOT RE 2: H373; STOT SE 3: H335 - Danger | ATP ATP01<br>30 - <50 %  |
| CAS: 85535-85-9<br>EC: 287-477-0<br>Index: 602-095-00-X<br>REACH: 01-2119519269-33-XXXX | <b>alkanes, C14-17, chloro</b> <input type="checkbox"/> <sup>1</sup> <input type="checkbox"/><br>Regulation 1272/2008 Aquatic Acute 1: H400; Aquatic Chronic 1: H410; Lact.: H362; EUH066 - Warning  | ATP ATP01<br>10 - <20 %  |
| CAS: 115-10-6<br>EC: 204-065-8<br>Index: 603-019-00-8<br>REACH: 01-2119472128-37-XXXX   | <b>dimethyl ether</b> <input type="checkbox"/> <sup>2</sup> <input type="checkbox"/><br>Regulation 1272/2008 Flam. Gas 1A: H220; Press. Gas: H280 - Danger   | ATP CLP00<br>2,5 - <10 % |
| CAS: 75-28-5<br>EC: 200-857-2<br>Index: 601-004-00-0<br>REACH: 01-2119485395-27-XXXX    | <b>isobutane</b> <input type="checkbox"/> <sup>2</sup> <input type="checkbox"/><br>Regulation 1272/2008 Flam. Gas 1A: H220; Press. Gas: H280 - Danger  | ATP CLP00<br>2,5 - <10 % |
| CAS: 74-98-6<br>EC: 200-827-9<br>Index: 601-003-00-5<br>REACH: 01-2119486944-21-XXXX    | <b>Propane</b> <input type="checkbox"/> <sup>2</sup> <input type="checkbox"/><br>Regulation 1272/2008 Flam. Gas 1A: H220; Press. Gas: H280 - Danger  | ATP CLP00<br>2,5 - <10 % |

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

<sup>2</sup> Voluntarily-listed substance failing to meet any of the criteria set out in Regulation (EU) No. 2020/878

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## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS (continued)

| Identification  | Chemical name/Classification   | Concentration   |
|---|--|-----------------|
| CAS: 25322-69-4<br>EC: 500-039-8<br>Index: Non-applicable<br>REACH: Non-applicable        | <b>Propane-1,2-diol, propoxylated</b> □ <sup>1</sup> □                                     | Self-classified |
|   | Regulation 1272/2008 Acute Tox. 4: H302 - Warning  | 2,5 - <5 %      |
| CAS: 25791-96-2<br>EC: 500-044-5<br>Index: Non-applicable<br>REACH: 01-2119484612-36-XXXX | <b>Glycerol, propoxylated</b> □ <sup>1</sup> □   | Self-classified |
|   | Regulation 1272/2008 Acute Tox. 4: H302 - Warning  | 1 - <2,5 %      |
| CAS: 556-67-2<br>EC: 209-136-7<br>Index: 014-018-00-1<br>REACH: 01-2119529238-36-XXXX     | <b>Octamethylcyclotetrasiloxane</b> □ <sup>1</sup> □                                       | Self-classified |
|   | Regulation 1272/2008 Aquatic Chronic 1: H410; Flam. Liq. 3: H226; Repr. 2: H361f - Warning | 0,01 - <0,1 %   |

□<sup>1</sup> Substances presenting a health or environmental hazard which meet criteria laid down in Regulation (EU) No. 2020/878□<sup>2</sup> Voluntarily-listed substance failing to meet any of the criteria set out in Regulation (EU) No. 2020/878

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

**Other information:**

| Identification | M-factor  |       |
|----------------|---|-------|
|                | Octamethylcyclotetrasiloxane<br>CAS: 556-67-2 EC: 209-136-7 | Acute |
|                | Chronic   | 10    |

| Identification  | Specific concentration limit  |
|---|---|
| 4,4'-methylenebisphenyl diisocyanate, isomers and homologues<br>CAS: 9016-87-9<br>EC: 618-498-9 | % (w/w) >=5: Skin Irrit. 2 - H315<br>% (w/w) >=5: Eye Irrit. 2 - H319<br>% (w/w) >=0,1: Resp. Sens. 1 - H334<br>% (w/w) >=5: STOT SE 3 - H335 |

## 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:**

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:**

Non-applicable

## SECTION 5: FIREFIGHTING MEASURES

**5.1 Extinguishing media:**

Suitable extinguishing media:

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## SECTION 5: FIREFIGHTING MEASURES (continued)

If possible use polyvalent powder fire extinguishers (ABC powder), alternatively use foam or carbon dioxide extinguishers (CO<sub>2</sub>).

**Unsuitable extinguishing media:**

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:****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 spilled 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:**

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:

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.- 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.

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**SECTION 7: HANDLING AND STORAGE (continued)**

**7.2 Conditions for safe storage, including any incompatibilities:**

A.- Technical measures for storage

Store in a cool, dry, well-ventilated location

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):**

Field of application of the product is described in Technical data sheet (TDS).

**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 |          |                        |
|---|------------------------------|----------|------------------------|
|   | IOELV (8h)                   | 1000 ppm | 1920 mg/m <sup>3</sup> |
| dimethyl ether<br>CAS: 115-10-6 EC: 204-065-8 | IOELV (STEL)                 |          |                        |

**DNEL (Workers):**

| Identification   |            | Short exposure |                       | Long exposure          |                        |
|--|------------|----------------|-----------------------|------------------------|------------------------|
|  |            | Systemic       | Local                 | Systemic               | Local                  |
| 4,4'-methylenediphenyl diisocyanate, isomers and homologues<br>CAS: 9016-87-9<br>EC: 618-498-9 | Oral       | Non-applicable | Non-applicable        | Non-applicable         | Non-applicable         |
|  | Dermal     | Non-applicable | Non-applicable        | Non-applicable         | Non-applicable         |
|  | Inhalation | Non-applicable | 0,1 mg/m <sup>3</sup> | Non-applicable         | 0,05 mg/m <sup>3</sup> |
| alkanes, C14-17, chloro<br>CAS: 85535-85-9<br>EC: 287-477-0                                    | Oral       | Non-applicable | Non-applicable        | Non-applicable         | Non-applicable         |
|  | Dermal     | Non-applicable | Non-applicable        | 47,9 mg/kg             | Non-applicable         |
|  | Inhalation | Non-applicable | Non-applicable        | 6,7 mg/m <sup>3</sup>  | Non-applicable         |
| dimethyl ether<br>CAS: 115-10-6<br>EC: 204-065-8   | Oral       | Non-applicable | Non-applicable        | Non-applicable         | Non-applicable         |
|  | Dermal     | Non-applicable | Non-applicable        | Non-applicable         | Non-applicable         |
|  | Inhalation | Non-applicable | Non-applicable        | 1894 mg/m <sup>3</sup> | Non-applicable         |
| Propane-1,2-diol, propoxylated<br>CAS: 25322-69-4<br>EC: 500-039-8                             | Oral       | Non-applicable | Non-applicable        | Non-applicable         | Non-applicable         |
|  | Dermal     | Non-applicable | Non-applicable        | 84 mg/kg               | Non-applicable         |
|  | Inhalation | Non-applicable | Non-applicable        | Non-applicable         | 10 mg/m <sup>3</sup>   |
| Glycerol, propoxylated<br>CAS: 25791-96-2<br>EC: 500-044-5                                     | Oral       | Non-applicable | Non-applicable        | Non-applicable         | Non-applicable         |
|  | Dermal     | Non-applicable | Non-applicable        | 13,9 mg/kg             | Non-applicable         |
|  | Inhalation | Non-applicable | Non-applicable        | 98 mg/m <sup>3</sup>   | Non-applicable         |
| Octamethylcyclotetrasiloxane<br>CAS: 556-67-2<br>EC: 209-136-7                                 | Oral       | Non-applicable | Non-applicable        | Non-applicable         | Non-applicable         |
|  | Dermal     | Non-applicable | Non-applicable        | Non-applicable         | Non-applicable         |
|  | Inhalation | Non-applicable | Non-applicable        | 73 mg/m <sup>3</sup>   | 73 mg/m <sup>3</sup>   |

**DNEL (General population):**

| Identification   |            | Short exposure |                        | Long exposure         |                         |
|--|------------|----------------|------------------------|-----------------------|-------------------------|
|  |            | Systemic       | Local                  | Systemic              | Local                   |
| 4,4'-methylenediphenyl diisocyanate, isomers and homologues<br>CAS: 9016-87-9<br>EC: 618-498-9 | Oral       | Non-applicable | Non-applicable         | Non-applicable        | Non-applicable          |
|  | Dermal     | Non-applicable | Non-applicable         | Non-applicable        | Non-applicable          |
|  | Inhalation | Non-applicable | 0,05 mg/m <sup>3</sup> | Non-applicable        | 0,025 mg/m <sup>3</sup> |
| alkanes, C14-17, chloro<br>CAS: 85535-85-9<br>EC: 287-477-0                                    | Oral       | Non-applicable | Non-applicable         | 0,58 mg/kg            | Non-applicable          |
|  | Dermal     | Non-applicable | Non-applicable         | 28,75 mg/kg           | Non-applicable          |
|  | Inhalation | Non-applicable | Non-applicable         | 2 mg/m <sup>3</sup>   | Non-applicable          |
| dimethyl ether<br>CAS: 115-10-6<br>EC: 204-065-8   | Oral       | Non-applicable | Non-applicable         | Non-applicable        | Non-applicable          |
|  | Dermal     | Non-applicable | Non-applicable         | Non-applicable        | Non-applicable          |
|  | Inhalation | Non-applicable | Non-applicable         | 471 mg/m <sup>3</sup> | Non-applicable          |

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**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)**

| Identification   |            | Short exposure |                | Long exposure  |                |
|--|------------|----------------|----------------|----------------|----------------|
|  |            | Systemic       | Local          | Systemic       | Local          |
| Propane-1,2-diol, propoxylated<br>CAS: 25322-69-4<br>EC: 500-039-8 | Oral       | Non-applicable | Non-applicable | 24 mg/kg       | Non-applicable |
|  | Dermal     | Non-applicable | Non-applicable | 51 mg/kg       | Non-applicable |
|  | Inhalation | Non-applicable | Non-applicable | Non-applicable | 10 mg/m³       |
| Glycerol, propoxylated<br>CAS: 25791-96-2<br>EC: 500-044-5         | Oral       | Non-applicable | Non-applicable | 8,3 mg/kg      | Non-applicable |
|  | Dermal     | Non-applicable | Non-applicable | 8,3 mg/kg      | Non-applicable |
|  | Inhalation | Non-applicable | Non-applicable | 29 mg/m³       | Non-applicable |
| Octamethylcyclotetrasiloxane<br>CAS: 556-67-2<br>EC: 209-136-7     | Oral       | Non-applicable | Non-applicable | 3,7 mg/kg      | Non-applicable |
|  | Dermal     | Non-applicable | Non-applicable | Non-applicable | Non-applicable |
|  | Inhalation | Non-applicable | Non-applicable | 13 mg/m³       | 13 mg/m³       |

**PNEC:**

| Identification   |              |                |                         |                |
|--|--------------|----------------|-------------------------|----------------|
| 4,4'-methylenediphenyl diisocyanate, isomers and homologues<br>CAS: 9016-87-9<br>EC: 618-498-9 | STP          | 1 mg/L         | Fresh water             | 1 mg/L         |
|  | Soil         | 1 mg/kg        | Marine water            | 0,1 mg/L       |
|  | Intermittent | 10 mg/L        | Sediment (Fresh water)  | Non-applicable |
|  | Oral         | Non-applicable | Sediment (Marine water) | Non-applicable |
| alkanes, C14-17, chloro<br>CAS: 85535-85-9<br>EC: 287-477-0                                    | STP          | 80 mg/L        | Fresh water             | 0,001 mg/L     |
|  | Soil         | 11,9 mg/kg     | Marine water            | 0,0002 mg/L    |
|  | Intermittent | Non-applicable | Sediment (Fresh water)  | 13 mg/kg       |
|  | Oral         | 0,01 g/kg      | Sediment (Marine water) | 2,6 mg/kg      |
| dimethyl ether<br>CAS: 115-10-6<br>EC: 204-065-8   | STP          | 160 mg/L       | Fresh water             | 0,155 mg/L     |
|  | Soil         | 0,045 mg/kg    | Marine water            | 0,016 mg/L     |
|  | Intermittent | 1,549 mg/L     | Sediment (Fresh water)  | 0,681 mg/kg    |
|  | Oral         | Non-applicable | Sediment (Marine water) | 0,069 mg/kg    |
| Propane-1,2-diol, propoxylated<br>CAS: 25322-69-4<br>EC: 500-039-8                             | STP          | 100 mg/L       | Fresh water             | 0,1 mg/L       |
|  | Soil         | 0,109 mg/kg    | Marine water            | 0,01 mg/L      |
|  | Intermittent | 1 mg/L         | Sediment (Fresh water)  | 0,765 mg/kg    |
|  | Oral         | Non-applicable | Sediment (Marine water) | 0,0765 mg/kg   |
| Glycerol, propoxylated<br>CAS: 25791-96-2<br>EC: 500-044-5                                     | STP          | 1000 mg/L      | Fresh water             | 0,2 mg/L       |
|  | Soil         | 0,067 mg/kg    | Marine water            | 0,02 mg/L      |
|  | Intermittent | 1 mg/L         | Sediment (Fresh water)  | 0,52 mg/kg     |
|  | Oral         | Non-applicable | Sediment (Marine water) | 0,052 mg/kg    |
| Octamethylcyclotetrasiloxane<br>CAS: 556-67-2<br>EC: 209-136-7                                 | STP          | 10 mg/L        | Fresh water             | 0,0015 mg/L    |
|  | Soil         | 0,54 mg/kg     | Marine water            | 0,00015 mg/L   |
|  | Intermittent | Non-applicable | Sediment (Fresh water)  | 3 mg/kg        |
|  | Oral         | 0,041 g/kg     | Sediment (Marine water) | 0,3 mg/kg      |



**8.2 Exposure controls:**

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

In accordance with the order of importance to control professional exposure (Directive 98/24/EC) it is recommended to use localized extraction in the work area as a collective protection measure to avoid exceeding the occupational exposure limits. In case of using personal protective equipment it should have CE marking in accordance with Directive 2016/425/EC. For more information on Personal Protective Equipment (storage, use, cleaning, maintenance, class of protection,...) consult the information leaflet provided by the manufacturer. For additional 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   |
|---|--|---|---|---|
|  | Filter mask for gases, vapours and particles |  | EN 149:2001+A1:2009<br>EN 405:2002+A1:2010<br>EN ISO 136:1998 | Replace when an increase in resistance to breathing is observed and/or a smell or taste of the contaminant is detected. |

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**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)**

C.- Specific protection for the hands





| Pictogram  | PPE                                       | Labelling   | CEN Standard  | Remarks  |
|--|---|---|---|--|
| <br>Mandatory hand protection | NON-disposable chemical protective gloves |  | EN ISO 374-1:2016+A1:2018<br>EN 16523-1:2015+A1:2018<br>EN 420:2004+A1:2010 | The Breakthrough Time indicated by the manufacturer must exceed the period during which the product is being used. Do not use protective creams after the product has come into contact with skin. |

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   |
|--|-------------|---|---|---|
| <br>Mandatory face protection | Face shield |  | EN 166:2002<br>EN 167:2002<br>EN 168:2002<br>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   |
|---|---|---|---|---|
| <br>Mandatory complete body protection | Disposable clothing for protection against chemical risks, with antistatic and fireproof properties |    | EN 1149-1,2,3<br>EN 13034:2005+A1:2009<br>EN ISO 13982-1:2004/A1:2010<br>EN ISO 6529:2013<br>EN ISO 6530:2005<br>EN ISO 13688:2013<br>EN 464:1994 | For professional use only. Clean periodically according to the manufacturer's instructions. |
| <br>Mandatory foot protection        | Safety footwear for protection against chemical risk, with antistatic and heat resistant properties |  | EN ISO 13287:2013<br>EN ISO 20345:2011<br>EN 13832-1:2019   | Replace boots at any sign of deterioration.   |

F.- Additional emergency measures

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

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

|                           |                                       |
|---------------------------|---------------------------------------|
| V.O.C. (Supply):          | 19,51 % weight                        |
| V.O.C. density at 20 °C:  | 192,15 kg/m <sup>3</sup> (192,15 g/L) |
| Average carbon number:    | 8,75                                  |
| Average molecular weight: | 324,46 g/mol                          |

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

**9.1 Information on basic physical and chemical properties:**

**Appearance:**

|                          |               |
|--------------------------|---------------|
| Physical state at 20 °C: | Aerosol       |
| Appearance:              | Not available |
| Colour:                  | Light yellow  |

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

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## Standard Gunfoam

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES (continued)

|  |                       |
|--|-----------------------|
| Odour:   | Not available         |
| Odour threshold:   | Non-applicable *      |
| <b>Volatility:</b>   |                       |
| Boiling point at atmospheric pressure:                       | -12 °C (Propellant)   |
| Vapour pressure at 20 °C:                                    | Non-applicable *      |
| Vapour pressure at 50 °C:                                    | <300000 Pa (300 kPa)  |
| Evaporation rate at 20 °C:                                   | Non-applicable *      |
| <b>Product description:</b>                                  |                       |
| Density at 20 °C:  | 985 kg/m <sup>3</sup> |
| Relative density at 20 °C:                                   | Non-applicable *      |
| 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:                                       | Non-applicable *      |
| Decomposition temperature:                                   | Non-applicable *      |
| Melting point/freezing point:                                | Non-applicable *      |
| Recipient pressure:  | Non-applicable *      |
| <b>Flammability:</b>   |                       |
| Flash Point:   | Non-applicable        |
| Flammability (solid, gas):                                   | Non-applicable *      |
| Autoignition temperature:                                    | 460 °C (Propellant)   |
| Lower flammability limit:                                    | Non-applicable *      |
| Upper flammability limit:                                    | Non-applicable *      |
| <b>Particle characteristics:</b>                             |                       |
| Median equivalent diameter:                                  | Non-applicable        |
| <b>9.2 Other information:</b>                                |                       |
| <b>Information with regard to physical hazard classes:</b>   |                       |
| Explosive properties:  | Non-applicable *      |
| Oxidising properties:  | Non-applicable *      |
| Corrosive to metals:   | Non-applicable *      |
| Heat of combustion:  | Non-applicable *      |
| Aerosols-total percentage (by mass) of flammable components: | Non-applicable *      |
| <b>Other safety characteristics:</b>                         |                       |
| 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:

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## SECTION 10: STABILITY AND REACTIVITY (continued)

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 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       |
|--------------------|------------------|-------------------------|---------------------|----------------|
| 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 (CO<sub>2</sub>), 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

Contains glycols. It is recommended not to breathe the vapours for prolonged periods of time due to the possibility of effects that are hazardous to the health.

**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, however, it contains 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. However, it contains substances classified as hazardous for inhalation. For more information see section 3.
- Corrosivity/Irritability: Causes irritation in respiratory passages, which is normally reversible and limited to the upper respiratory passages.

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

- Contact with the skin: Produces skin inflammation.
- Contact with the eyes: Produces eye damage after contact.

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

- Carcinogenicity: Exposure to this product can cause cancer. For more specific information on the possible health effects see section 2.  
IARC: 4,4'-methylenediphenyl diisocyanate, isomers and homologues (3); alkanes, C14-17, chloro (2B)
- 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: May cause harm to breast-fed children

## E- Sensitizing effects:

- Respiratory: Prolonged exposure can result in specific respiratory hypersensitivity.
- Skin: Prolonged contact with the skin can result in episodes of allergic contact dermatitis.

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

Causes irritation in respiratory passages, which is normally reversible and limited to the upper respiratory passages.

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## SECTION 11: TOXICOLOGICAL INFORMATION (continued)

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

- Specific target organ toxicity (STOT)-repeated 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.
- 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, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

**Other information:**

Non-applicable

**Specific toxicology information on the substances:**

| Identification   | Acute toxicity  |                  | Genus  |
|--|-----------------|------------------|--------|
|  |                 |                  |        |
| 4,4'-methylenediphenyl diisocyanate, isomers and homologues<br>CAS: 9016-87-9<br>EC: 618-498-9 | LD50 oral       | >2000 mg/kg      |        |
|  | LD50 dermal     | >2000 mg/kg      |        |
|  | LC50 inhalation | 11 mg/L (ATEi)   |        |
| Isobutane<br>CAS: 75-28-5<br>EC: 200-857-2   | LD50 oral       | >2000 mg/kg      |        |
|  | LD50 dermal     | >2000 mg/kg      |        |
|  | LC50 inhalation | >5 mg/L          |        |
| Propane<br>CAS: 74-98-6<br>EC: 200-827-9   | LD50 oral       | >2000 mg/kg      |        |
|  | LD50 dermal     | >2000 mg/kg      |        |
|  | LC50 inhalation | >5 mg/L          |        |
| dimethyl ether<br>CAS: 115-10-6<br>EC: 204-065-8   | LD50 oral       | >2000 mg/kg      |        |
|  | LD50 dermal     | >2000 mg/kg      |        |
|  | LC50 inhalation | 308,5 mg/L (4 h) | Rat    |
| Glycerol, propoxylated<br>CAS: 25791-96-2<br>EC: 500-044-5                                     | LD50 oral       | 500 mg/kg (ATEi) |        |
|  | LD50 dermal     | >2000 mg/kg      |        |
|  | LC50 inhalation | >20 mg/L         |        |
| Propane-1,2-diol, propoxylated<br>CAS: 25322-69-4<br>EC: 500-039-8                             | LD50 oral       | 1000 mg/kg       | Rat    |
|  | LD50 dermal     | >2000 mg/kg      |        |
|  | LC50 inhalation | >20 mg/L         |        |
| alkanes, C14-17, chloro<br>CAS: 85535-85-9<br>EC: 287-477-0                                    | LD50 oral       | >2000 mg/kg      |        |
|  | LD50 dermal     | >2000 mg/kg      |        |
|  | LC50 inhalation | >20 mg/L         |        |
| Octamethylcyclotetrasiloxane<br>CAS: 556-67-2<br>EC: 209-136-7                                 | LD50 oral       | 61440 mg/kg      | Rat    |
|  | LD50 dermal     | 10000 mg/kg      | Rabbit |
|  | LC50 inhalation | >20 mg/L         |        |

**11.2 Information on other hazards:****Endocrine disrupting properties**

Endocrine-disrupting properties: The product fails to meet the criteria.

**Other information**

Non-applicable

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**SECTION 12: ECOLOGICAL INFORMATION**

**12.1 Toxicity:**

**Product-specific aquatic toxicity:**

| Acute toxicity |                   | Species                 | Genus      |
|----------------|-------------------|-------------------------|------------|
| EC50           | >1000 mg/L (48 h) | Daphnia magna           | Crustacean |
| EC50           | 1000 mg/L (72 h)  | Desmodesmus subspicatus | Algae      |

**Substance-specific aquatic toxicity:**

**Acute toxicity:**

| Identification   | Concentration |                 | Species | Genus      |
|--|---------------|-----------------|---------|------------|
| alkanes, C14-17, chloro<br>CAS: 85535-85-9<br>EC: 287-477-0    | LC50          | >0.1 - 1 (96 h) |         | Fish       |
|  | EC50          | >0.1 - 1 (48 h) |         | Crustacean |
|  | EC50          | >0.1 - 1 (72 h) |         | Algae      |
| Octamethylcyclotetrasiloxane<br>CAS: 556-67-2<br>EC: 209-136-7 | LC50          | >0.1 - 1 (96 h) |         | Fish       |
|  | EC50          | >0.1 - 1 (48 h) |         | Crustacean |
|  | EC50          | >0.1 - 1 (72 h) |         | Algae      |

**Chronic toxicity:**

| Identification  | Concentration |             | Species             | Genus      |
|---|---------------|-------------|---------------------|------------|
| Octamethylcyclotetrasiloxane<br>CAS: 556-67-2 EC: 209-136-7 | NOEC          | 0,0044 mg/L | Oncorhynchus mykiss | Fish       |
|   | NOEC          | 0,015 mg/L  | Daphnia magna       | Crustacean |

**12.2 Persistence and degradability:**

| Identification | Degradability  |                | Biodegradability |               |
|----------------|--|----------------|------------------|---------------|
|                | Octamethylcyclotetrasiloxane<br>CAS: 556-67-2<br>EC: 209-136-7 | BOD5           | Non-applicable   | Concentration |
| COD            |  | Non-applicable | Period           | 29 days       |
| BOD5/COD       |  | Non-applicable | % Biodegradable  | 4 %           |

**12.3 Bioaccumulative potential:**

| Identification   | Bioaccumulation potential |           |
|--|---------------------------|-----------|
| Isobutane<br>CAS: 75-28-5<br>EC: 200-857-2                     | BCF                       | 27        |
|  | Pow Log                   | 2.76      |
|  | Potential                 | Low       |
| Propane<br>CAS: 74-98-6<br>EC: 200-827-9                       | BCF                       | 13        |
|  | Pow Log                   | 2.86      |
|  | Potential                 | Low       |
| Octamethylcyclotetrasiloxane<br>CAS: 556-67-2<br>EC: 209-136-7 | BCF                       | 12400     |
|  | Pow Log                   | 6.5       |
|  | Potential                 | Very High |

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## SECTION 12: ECOLOGICAL INFORMATION (continued)

## 12.4 Mobility in soil:

| Identification   | Absorption/desorption |                      | Volatility |                                  |
|--|-----------------------|----------------------|------------|----------------------------------|
|  | Koc                   | Non-applicable       | Henry      | Non-applicable                   |
| dimethyl ether<br>CAS: 115-10-6<br>EC: 204-065-8               | Conclusion            | Non-applicable       | Dry soil   | Non-applicable                   |
|  | Surface tension       | 1,136E-2 N/m (25 °C) | Moist soil | Non-applicable                   |
| Isobutane<br>CAS: 75-28-5<br>EC: 200-857-2                     | Koc                   | 35                   | Henry      | 120576,75 Pa·m <sup>3</sup> /mol |
|  | Conclusion            | Very High            | Dry soil   | Yes                              |
|  | Surface tension       | 9,84E-3 N/m (25 °C)  | Moist soil | Yes                              |
| Propane<br>CAS: 74-98-6<br>EC: 200-827-9                       | Koc                   | 460                  | Henry      | 71636,78 Pa·m <sup>3</sup> /mol  |
|  | Conclusion            | Moderate             | Dry soil   | Yes                              |
|  | Surface tension       | 7,02E-3 N/m (25 °C)  | Moist soil | Yes                              |
| Octamethylcyclotetrasiloxane<br>CAS: 556-67-2<br>EC: 209-136-7 | Koc                   | 16600                | Henry      | 1200000 Pa·m <sup>3</sup> /mol   |
|  | Conclusion            | Immobile             | Dry soil   | Yes                              |
|  | Surface tension       | 1,819E-2 N/m (25 °C) | Moist soil | Yes                              |

## 12.5 Results of PBT and vPvB assessment:

Product contains PBT/vPvB substances: alkanes, C14-17, chloro

## 12.6 Endocrine disrupting properties:

Endocrine-disrupting properties: The product fails to 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 | Dangerous                                  |

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

HP3 Flammable, HP14 Ecotoxic, HP5 Specific Target Organ Toxicity (STOT)/Aspiration Toxicity, HP6 Acute Toxicity, HP7 Carcinogenic, HP13 Sensitising, 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-dangerous 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 2021 and RID 2021:

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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 Environmental hazards:** No
- 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:** Non-applicable

**Transport of dangerous goods by sea:**

With regard to IMDG 39-18:



- 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:** No
- 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 Maritime transport in bulk according to IMO instruments:** Non-applicable

**Transport of dangerous goods by air:**

With regard to IATA/ICAO 2022:



- 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:** No
- 14.6 Special precautions for user**  
Physico-Chemical properties: see section 9
- 14.7 Maritime transport in bulk according to IMO instruments:** 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): alkanes, C14-17, chloro ; Octamethylcyclotetrasiloxane  
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                     |

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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 ....)**  
:

Contains more than 0.1 % of 4,4'-methylenediphenyl diisocyanate, isomers and homologues by weight. 1. Shall not be used as substances on their own, as a constituent in other substances or in mixtures for industrial and professional use(s) after 24 August 2023, unless:

(a) the concentration of diisocyanates individually and in combination is less than 0,1 % by weight, or (b) the employer or self-employed ensures that industrial or professional user(s) have successfully completed training on the safe use of diisocyanates prior to the use of the substance(s) or mixture(s).

2. Shall not be placed on the market as substances on their own, as a constituent in other substances or in mixtures for industrial and professional use(s) after 24 February 2022, unless:

(a) the concentration of diisocyanates individually and in combination is less than 0,1 % by weight, or (b) the supplier ensures that the recipient of the substance(s) or mixture(s) is provided with information on the requirements referred to in point (b) of paragraph 1 and the following statement is placed on the packaging, in a manner that is visibly distinct from the rest of the label information: "As from 24 August 2023 adequate training is required before industrial or professional use".

3. For the purpose of this entry "industrial and professional user(s)" means any worker or self-employed worker handling diisocyanates on their own, as a constituent in other substances or in mixtures for industrial and professional use(s) or supervising these tasks.

4. The training referred to in point (b) of paragraph 1 shall include the instructions for the control of dermal and inhalation exposure to diisocyanates at the workplace without prejudice to any national occupational exposure limit value or other appropriate risk management measures at national level. Such training shall be conducted by an expert on occupational safety and health with competence acquired by relevant vocational training. That training shall cover as a minimum:

(a) the training elements in point (a) of paragraph 5 for all industrial and professional use(s).

(b) the training elements in points (a) and (b) of paragraph 5 for the following uses:

- handling open mixtures at ambient temperature (including foam tunnels)
- spraying in a ventilated booth
- application by roller
- application by brush
- application by dipping and pouring
- mechanical post treatment (e.g. cutting) of not fully cured articles which are not warm anymore
- cleaning and waste
- any other uses with similar exposure through the dermal and/or inhalation route

(c) the training elements in points (a), (b) and (c) of paragraph 5 for the following uses:

- handling incompletely cured articles (e.g. freshly cured, still warm)
- foundry applications
- maintenance and repair that needs access to equipment
- open handling of warm or hot formulations (> 45 °C)
- spraying in open air, with limited or only natural ventilation (includes large industry working halls) and spraying with high energy (e.g. foams, elastomers)
- and any other uses with similar exposure through the dermal and/or inhalation route.

5. Training elements:

(a) general training, including on-line training, on:

- chemistry of diisocyanates
- toxicity hazards (including acute toxicity)
- exposure to diisocyanates
- occupational exposure limit values
- how sensitisation can develop
- odour as indication of hazard
- importance of volatility for risk
- viscosity, temperature, and molecular weight of diisocyanates
- personal hygiene
- personal protective equipment needed, including practical instructions for its correct use and its limitations
- risk of dermal contact and inhalation exposure
- risk in relation to application process used
- skin and inhalation protection scheme
- ventilation
- cleaning, leakages, maintenance
- discarding empty packaging
- protection of bystanders
- identification of critical handling stages
- specific national code systems (if applicable)
- behaviour-based safety
- certification or documented proof that training has been successfully completed

(b) intermediate level training, including on-line training, on:

- additional behaviour-based aspects
- maintenance
- management of change

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## SECTION 15: REGULATORY INFORMATION (continued)

- evaluation of existing safety instructions
- risk in relation to application process used
- certification or documented proof that training has been successfully completed
- (c) advanced training, including on-line training, on:
  - any additional certification needed for the specific uses covered
  - spraying outside a spraying booth
  - open handling of hot or warm formulations (> 45 °C)
  - certification or documented proof that training has been successfully completed

6. The training shall comply with the provisions set by the Member State in which the industrial or professional user(s) operate. Member States may implement or continue to apply their own national requirements for the use of the substance(s) or mixture(s), as long as the minimum requirements set out in paragraphs 4 and 5 are met.

7. The supplier referred to in point (b) of paragraph 2 shall ensure that the recipient is provided with training material and courses pursuant to paragraphs 4 and 5 in the official language(s) of the Member State(s) where the substance(s) or mixture(s) are supplied. The training shall take into consideration the specificity of the products supplied, including composition, packaging, and design.

8. The employer or self-employed shall document the successful completion of the training referred to in paragraphs 4 and 5. The training shall be renewed at least every five years.

9. Member States shall include in their reports pursuant to Article 117(1) the following information:

- (a) any established training requirements and other risk management measures related to the industrial and professional uses of diisocyanates foreseen in national law
- (b) the number of cases of reported and recognised occupational asthma and occupational respiratory and dermal diseases in relation to diisocyanates
- (c) national exposure limits for diisocyanates, if there are any
- (d) information about enforcement activities related to this restriction.

10. This restriction shall apply without prejudice to other Union legislation on the protection of safety and health of workers at the workplace.

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.

Contains Octamethylcyclotetrasiloxane, Decamethylcyclopentasiloxane. 1. | Shall not be placed on the market in wash-off cosmetic products in a concentration equal to or greater than 0,1 % by weight of either substance, after 31 January 2020. | 2. | For the purposes of this entry, "wash-off cosmetic products" means cosmetic products as defined in Article 2(1)(a) of Regulation (EC) No 1223/2009 that, under normal conditions of use, are washed off with water after application.'

Contains more than 0.1 % of 4,4'-methylenediphenyl diisocyanate, isomers and homologues by weight. This product may not be distributed in its present form for first-time sale to the general public after 27th December 2010 unless the packaging contains protective gloves meeting the provisions of Regulation (EU) 2016/425.

**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.

## SECTION 16: OTHER INFORMATION

**Legislation related to safety data sheets:**

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## Safety data sheet

This SDS is an English translation of COMMISSION REGULATION (EU) 2020/878, without any country-specific legislation

## Standard Gunfoam

## SECTION 16: OTHER INFORMATION (continued)

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.:**

Non-applicable

**Texts of the legislative phrases mentioned in section 2:**

H222: Extremely flammable aerosol.

H315: Causes skin irritation.

H319: Causes serious eye irritation.

H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H317: May cause an allergic skin reaction.

H351: Suspected of causing cancer.

H362: May cause harm to breast-fed children.

H335: May cause respiratory irritation.

H373: May cause damage to organs through prolonged or repeated exposure.

H413: May cause long lasting harmful effects to aquatic life.

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:**

Acute Tox. 4: H302 - Harmful if swallowed.

Acute Tox. 4: H332 - Harmful if inhaled.

Aquatic Acute 1: H400 - Very toxic to aquatic life.

Aquatic Chronic 1: H410 - Very toxic to aquatic life with long lasting effects.

Carc. 2: H351 - Suspected of causing cancer.

Eye Irrit. 2: H319 - Causes serious eye irritation.

Flam. Gas 1A: H220 - Extremely flammable gas.

Flam. Liq. 3: H226 - Flammable liquid and vapour.

Lact.: H362 - May cause harm to breast-fed children.

Press. Gas: H280 - Contains gas under pressure, may explode if heated.

Repr. 2: H361f - Suspected of damaging fertility.

Resp. Sens. 1: H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Skin Irrit. 2: H315 - Causes skin irritation.

Skin Sens. 1: H317 - May cause an allergic skin reaction.

STOT RE 2: H373 - May cause damage to organs through prolonged or repeated exposure.

STOT SE 3: H335 - May cause respiratory irritation.

**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

**Other information:**

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## Safety data sheet

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## Standard Gunfoam

## SECTION 16: OTHER INFORMATION (continued)

Classification procedure:  
Aerosol 1: Calculation method  
Aerosol 1: Calculation method  
Carc. 2: Calculation method  
Eye Irrit. 2: Calculation method  
Lact.: Calculation method  
Resp. Sens. 1: Calculation method  
Skin Irrit. 2: Calculation method  
Skin Sens. 1: Calculation method  
STOT RE 2: Calculation method  
STOT SE 3: Calculation method  
Aquatic Chronic 4: Test data

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 -