

Safety Data Sheet

according to 1907/2006/EC, Article 31

Date: 10.02.2011

Replaces: 19.07.2010

Ref: 0057.7.D/DR

1 Identification of the substance/mixture and of the company/undertaking

- **Product details**

- **Trade name:** SX Flameguard Fire Retardant Foam - Hand Held & Gun Grade (Pink)

- **Application of the substance / the preparation**

1-Component polyurethane foam in aerosol cans
B1 quality

- **Manufacturer/Supplier:**

Siroflex Limited
Dodworth Business Park,
Dodworth,
Barnsley, South Yorkshire.
S75 3SP.

Tel: 01226 771600 Fax: 01226 771601


E-Mail: info@siroflex.co.uk Web: www.siroflex.co.uk

- **Information in case of emergency:** Tel. +49 (0)35797 646 0 (from monday til friday 8 a.m to 7 p.m.)


2 Hazards identification

- **Classification of the substance or mixture**


- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**

 Xn; Harmful


R20-40-48/20: Harmful by inhalation. Limited evidence of a carcinogenic effect. Harmful: danger of serious damage to health by prolonged exposure through inhalation.

 Xi; Irritant

R36/37/38: Irritating to eyes, respiratory system and skin.

 Xi; Sensitising

R43-42: May cause sensitisation by skin contact. May cause sensitisation by inhalation.

 F+; Extremely flammable

R12: Extremely flammable.

- **Information concerning particular hazards for human and environment:**

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

Warning! Pressurized container.

- **Classification system:**

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

- **Label elements**

- **Labelling according to EU guidelines:**

The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.

- **Code letter and hazard designation of product:**



Xn Harmful

F+ Extremely flammable

- **Hazard-determining components of labelling:**

diphenylmethanediisocyanate, isomeres and homologues

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· **Risk phrases:**

- 20 Harmful by inhalation.
 36/37/38 Irritating to eyes, respiratory system and skin.
 40 Limited evidence of a carcinogenic effect.
 42/43 May cause sensitisation by inhalation and skin contact.
 48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation.
 12 Extremely flammable.

· **Safety phrases:**

- 2 Keep out of the reach of children.
 16 Keep away from sources of ignition - No smoking.
 23 Do not breathe fumes/aerosol.
 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
 28 After contact with skin, wash immediately with plenty of soap and water.
 37/39 Wear suitable gloves and eye/face protection.
 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
 51 Use only in well-ventilated areas.
 56 Dispose of this material and its container to hazardous or special waste collection point.

· **Special labelling of certain preparations:**

- Contains isocyanates. See information supplied by the manufacturer
 Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use.
 Do not spray on a naked flame or any incandescent material.
 Buildup of explosive mixtures possible without sufficient ventilation.

· **Additional information:**








- When transported by motorcar or truck cans have to stand upright in the boot or on the loading space - not in car interior.
 Only unreacted formulation or fresh foam is harmful.
 In use, may form flammable/ explosive vapour-air mixture.

3 Composition/information on ingredients

· **Chemical characterization**

- **Description:** Mixture of substances listed below with nonhazardous additions.

· **Dangerous components:**

CAS: 9016-87-9	diphenylmethanediisocyanate, isomeres and homologues  Xn R20-40-48/20;  Xi R36/37/38;  Xi R43-42 Carc. Cat. 3	25-50%
CAS: 13674-84-5	tris(2-chlorisopropyl)-phosphate  Xn R22	10-25%
CAS: 115-10-6 EINECS: 204-065-8	dimethyl ether  F+ R12	2.5-10%
CAS: 75-28-5 EINECS: 200-857-2	isobutane  F+ R12	2.5-10%
CAS: 74-98-6 EINECS: 200-827-9	propane  F+ R12	≤ 2.5%

- **Additional information:** For the wording of the listed risk phrases refer to section 16.

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4 First aid measures

- **General information:** Immediately remove any clothing soiled by the product.
- **After inhalation:**
Supply fresh air; consult doctor in case of complaints.
Take affected persons into fresh air and keep quiet.
- **After skin contact:**
Immediately wash with polyethylen glycol 400 and afterwards with warm water and soap and rinse thoroughly.
If skin irritation continues, consult a doctor.
Fresh foam remove or scrape carefully.
- **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing:** Do not induce vomiting. Drink plenty of water. Call for medical help immediately.

5 Firefighting measures

- **Suitable extinguishing agents:** CO₂, powder or water spray. Fight larger fires with water spray.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **Special hazards caused by the substance, its products of combustion or resulting gases:**
Can form explosive gas-air mixtures.
Formation of toxic gases is possible during heating or in case of fire: CO, NO_x, isocyanate vapour and traces of hydrogen cyanide.
Danger of bursting by heating.
- **Protective equipment:** Wear self-contained respiratory protective device.
- **Additional information**
Cool endangered receptacles with water spray and remove it out of emergency area if possible.
Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

6 Accidental release measures

- **Person-related safety precautions:**
Wear protective equipment. Keep unprotected persons away. Do not flush with water or aqueous cleansing agents.
Ensure adequate ventilation. It must not enter the sewage system. Remove mechanically. Cover the rest with absorbing material like sand, diatomite, universal binders or sawdust. After about 1 hour put it in a litter bin (do not cover due to CO₂ release). Keep it wet for some days in the outdoor and dispose it following instruction of chapter 13.
Keep away from ignition sources.
- **Measures for environmental protection:**
Do not allow product to reach sewage system or any water course.
- **Measures for cleaning/collecting:**
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
Foamed out fresh material should be wetted or covered with moisture absorbing materials (sand, wood shavings, absorbing chemicals) for curing

7 Handling and storage

- **Handling:**
- **Information for safe handling:**
Ensure good ventilation/exhaustion at the workplace. Open and handle receptacle with care. Avoid aerosol forming.

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Open and handle receptacle with care.

· **Information about fire - and explosion protection:**

Do not spray onto a naked flame or any incandescent material.

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C, i.e. electric lights. Do not pierce or burn, even after use.

· **Storage:**

· **Requirements to be met by storerooms and receptacles:**

Store in a cool location under dry conditions in well sealed receptacles

Observe official regulations on storing packagings with pressurized containers.

· **Information about storage in one common storage facility:** Not required.

· **Further information about storage conditions:**

Store in cool, dry conditions in well sealed receptacles.

Protect from heat and direct sunlight.

8 Exposure controls/personal protection

· **Additional information about design of technical facilities:** No further data; see item 7.

· **Ingredients with limit values that require monitoring at the workplace:**

9016-87-9 diphenylmethanediisocyanate, isomeres and homologues

WEL Short-term value: 0.07 mg/m³

Long-term value: 0.02 mg/m³

Sen; as -NCO

115-10-6 dimethyl ether

WEL Short-term value: 958 mg/m³, 500 ppm

Long-term value: 766 mg/m³, 400 ppm

· **Additional information:** The lists valid during the making were used as basis.

· **Personal protective equipment:**

· **General protective and hygienic measures:**

Give workers information about the harmful nature of the chemical mixture. Provide them with training on handling chemicals safely and what to do if something goes wrong.

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

· **Respiratory protection:**

Not necessary if room is well-ventilated.

In case of brief exposure or low pollution use respiratory filter device, e.g. EN 14387 type ABEK). In case of intensive or longer exposure use self-contained respiratory protective device. Respiratory protective equipment (RPE) should not be needed for routine tasks. Keep any RPE clean, and replace at recommended intervals.

Biological monitoring by urine testing is recommended to assess exposure to isocyanate and the effectiveness of controls such as RPE and safe working procedures. This means taking samples of urine once or twice a year of workers that may have breathed in spray or vapour, and from unprotected workers nearby. Urine samples should be collected immediately the task has finished.

Filter AX

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· Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

Chemical resistant gloves (penetration time > 480 min, EN 374, recommendation):

Butyl rubber - 0.7 mm thickness

Nitrile rubber (NBR) - 0.4 mm thickness

Chloropren rubber (CR) - 0.5 mm thickness

non-suitable gloves:

PVC - 0.7 mm thickness

PE-laminate - around 0.1 mm thickness

Recommendation:

Polychloropren CR (min. 0,5mm)

Nitrile rubber NBR (min. 0,5mm)

· Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye protection:



Safety glasses

· Body protection: Protective work clothing

9 Physical and chemical properties

· General Information

· Appearance:

Form: Aerosol
Colour: beige or colored
Odour: Characteristic

· Change in condition

Melting point/Melting range: Undetermined.
Boiling point/Boiling range: Not applicable, as aerosol.

· Flash point: Not applicable, as aerosol.

· Ignition temperature: 235°C

· Self-igniting: Product is not selfigniting.

· Danger of explosion: Product is not explosive. However, formation of explosive air/vapour mixtures are possible.

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- | | |
|--|-----------------------------------|
| · Vapour pressure at 20°C: | 6 bar |
| · Density at 20°C: | 1.06 g/cm ³ |
| · Solubility in / Miscibility with water: | Not miscible or difficult to mix. |

10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.
- **Materials to be avoided:**
- **Dangerous reactions** Danger of bursting.
- **Dangerous decomposition products:**
Carbon monoxide and carbon dioxide
Nitrogen oxides (NO_x)
Hydrogen cyanide (prussic acid)
Hydrogen chloride (HCl)

11 Toxicological information

- **Acute toxicity:**

- **LD/LC50 values relevant for classification:**

9016-87-9 diphenylmethanediisocyanate, isomeres and homologues

Oral	LD50	>5000 mg/kg (rat)
Dermal	LD50	>5000 mg/kg (rabbit)
Inhalative	LC50/4 h	0.49 mg/l (rat)

13674-84-5 tris(2-chlorisopropyl)-phosphate

Oral	LD50	3600 mg/kg (rat)
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- **Primary irritant effect:**
- **on the skin:** Irritant to skin and mucous membranes.
- **on the eye:** Irritating effect.
- **Sensitization:**
Sensitization possible through inhalation or skin contact.
Sensitization possible through skin contact.
- **Additional toxicological information:**
The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:
Harmful
Irritant
- **Sensitisation** May cause sensitisation by inhalation and skin contact.

12 Ecological information

- **Additional ecological information:**
- **General notes:**
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water

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13 Disposal considerations

· **Product:**

· **Recommendation**

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

Taking back and recycling of empty cans free of charge in Germany :

PDR Recycling GmbH & Co KG

Am -Alten-Sägewerk 3

D-95349 Thurnau

Free call 0800 783 67 36

Fax 0800 783 67 37

· **European waste catalogue**

17 06 04	insulation materials other than those mentioned in 17 06 01 and 17 06 03
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16 05 04	gases in pressure containers (including halons) containing dangerous substances
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· **Uncleaned packaging:**

· **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

· **Land transport ADR/RID (cross-border)**



- **ADR/RID class:** 2 5F Gases.
- **Danger code (Kemler):** -
- **UN-Number:** 1950
- **Packaging group:** -
- **Hazard label** 2.1
- **Description of goods:** 1950 AEROSOLS
- **Excepted quantities (EQ):** E0
- **Limited quantities (LQ)** LQ2
- **Transport category** 2
- **Tunnel restriction code** D

· **Maritime transport IMDG:**



- **IMDG Class:** 2.1
- **UN Number:** 1950
- **Label** 2.1
- **Packaging group:** -
- **EMS Number:** F-D,S-U
- **Marine pollutant:** No

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· **Proper shipping name:** AEROSOLS

· **Air transport ICAO-TI and IATA-DGR:**



· **ICAO/IATA Class:** 2.1

· **UN/ID Number:** 1950

· **Label:** 2.1

· **Packaging group:** -

· **Proper shipping name:** AEROSOLS, flammable

15 Regulatory information

· **Chemical safety assessment** A Chemical Safety Assessment has not been carried out.

· **National regulations:**

· **Information about limitation of 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.

· **Waterhazard class:** Water hazard class 1 (Self-assessment): slightly hazardous for water.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Relevant phrases**

R12 Extremely flammable.

R20 Harmful by inhalation.

R22 Harmful if swallowed.

R36/37/38 Irritating to eyes, respiratory system and skin.

R40 Limited evidence of a carcinogenic effect.

R42/43 May cause sensitisation by inhalation and skin contact.

R48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation.