Firebreak 44 Fire Resistant Expanding Foam

SAFETY DATA SHEET

1. Identification of the preparation and company

Product Name: Firebreak 44 Fire Resistant Expanding Foam.

- One component polyurethane foam with fire and smoke resisting gap and service penetrating capability for internal use.

Supplier: Neutron Fire Technologies Limited, Shire Hall, Lostwithiel, Cornwall, PL22 0BS, United Kingdom. Telephone: +44 (0) 1208 871185 Facsimile: +44 (0) 1208 871254 Email: sales@neutronfire.com

2. Composition / information on ingredients

Substance	CAS no.	EINECS no.	Concentration (%)	Symbol	R Phrases
Methylenediphenyl Diisocyanate	26447-40-5	247-7140	10 – 24	Xn	R20-36/37/38-40-42/43-48/20
Iso-butane	75-28-5	200-857-2	1 – 19	F+	R12
Propane	74-98-6	200-827-9	1 – 19	F+	R12
Dimethyl Ether	115-10-6	204-065-8	1 – 19	F+	R12
C14-17 Chloroalkanes	85535-85-9	287-477-0	1 – 2.5	N	R64-66-50/53

Refer to section 16

3. Hazards identification

(1) Physico-chemical hazards: See section 10 and R phrases.
(2) Human health dangers: See R phrases.
(3) Environmental hazards: See R phrases.
(4) Other hazards: None.
(5) Hazard symbols:

EXTREMELY FLAMMABLE

HARMFUL

R phrases

R 12: Extremely flammable.
R 36/37/38: Irritating to eyes, respiratory system and skin.
R 40: Limited evidence of a carcinogenic effect.
R 42/43: May cause sensitization by inhalation and skin contact.
R 48/20: Harmful – danger of serious damage to health by prolonged exposure through inhalation.
R 53: May cause long term adverse effects in the aquatic environment.
R 64: May cause harm to breastfed babies.

4. First-aid measures

General:

- In all cases of doubt, or when symptoms persist, seek medical attention
- If unconscious, place in recovery position, give nothing by mouth

Inhalation:

- Remove to fresh air
- If breathing is irregular or stopped, administer artificial respiration

Eye contact:

- Remove contact lenses
- Immediately irrigate copiously with clean water for at least 15 minutes and seek medical attention

Skin contact:

- Remove contaminated clothing
- Wash skin thoroughly with soap and water or recognised skin cleaner
- Do not use solvents or thinners
- Seek medical attention if skin irritation persists

Ingestion:

- If swallowed wash mouth with water; drink large volumes of water and obtain immediate medical attention
- Keep at rest
- Do NOT induce vomiting

Continues on the next page.

5. Firefighting measures

Suitable extinguishing media:
- Carbon dioxide, foam, dry powder, water spray/mist

Extinguishing media that must NOT be used:
- Full water jet

Special exposure hazards arising from the preparation or its combustion products:
- Hydrogen Chloride (HCl)
- Hydrogen Cyanide (HCN)
- Nitrogen Oxides (NOx)
- Bursting aerosols can be forcibly projected from a fire

Special protective equipment for firefighters:
- Use self-contained breathing apparatus

Additional information:
- Do not inhale explosion or combustion gases
- Fire residues and contaminated firefighting water must be disposed of in accordance with local regulations
- Cool containers at risk with water spray jet

6. Accidental release measures

Personal precautions
- Keep away from all sources of ignition
- Ensure adequate ventilation

Environmental precautions
- Contain/collect spillage with non-combustible absorbent material (e.g. sand)
- Place waste in labelled containers and dispose of in accordance with local regulation

7. Handling and storage

Handling:
- Use only in well ventilated areas

Advice on protection against fire and explosion:
- Keep away from all sources of ignition
- Refrain from smoking

Requirements for storage rooms and vessels:
- Provide a solvent-resistant and impermeable floor

Advice on storage compatibility:
- Do not store together with oxidizing agents

Further information on storage conditions:
- Keep containers in a cool and well ventilated place
- Protect from overheating
- Heat causes an increase in pressure and risk of bursting

8. Exposure controls / personal protection

Additional advice on system design:
- Ensure adequate ventilation at work area

Ingredients with occupational exposure limits to be monitored

Concentration	Substance/WEL (workspace exposure limit)
10 – 24%	Methyledipheny Diisocyanate / -ppm, 0.02mg/m^3, Sen, 25/3
1 – 19%	Iso-butane / 600ppm, 1450mg/m^3, n-Butane
1 – 19%	Propane / -ppm, -mg/m^3, Asphyxiant
1 –19%	Dimethyl Ether / 400ppm, 766mg/m^3, IOLEV

Respiritory protection:
- Use breathing apparatus in the event of high concentrations
- For short-term use, use a face mask with filter type A-P2

Hand protection:
- Recommended to use butyl rubber gloves (to standard EN 374

Eye protection:
- Wear safety glasses

Skin protection:
- Wear light, protective clothing

General protective measures:
- Avoid contact with eyes and skin
- Do not inhale vapours
- Personal protective equipment should be selected specifically for the workplace depending on concentration and quantity of the hazardous substances handled

Hygiene measures:
- Observe normal standards of industrial hygiene
- Do not eat, drink or smoke while handling hazardous materials
- Clean skin thoroughly after work
- Use barrier skin cream
- Remove contaminated clothing immediately and dispose of responsibly

Continues on the next page.

9. Physical and chemical properties

Appearance:
- Physical state: Aerosol
- Colour: Red
- Odour: Characteristic

Safety relevant basic data:
- Flash point: Not applicable
- Specific gravity: Approx. 0.96g/cm^3 at 20°C
- Solubility in water: Reacts with water

10. Stability and reactivity

Hazardous reactions:
- Containers are liable to burst if temperature rises above 50°C
- Without adequate ventilation, the formation of explosive gas/air mixtures is possible

Hazardous decomposition products:
- See section 5

11. Toxocological information

General remarks:
- The product was classified on the basis of the calculation procedure of the preparation directive

Acute oral toxicity:
- Not determined

Acute dermal toxicity:
- Not determined

Acute inhalation toxicity:
- Not determined

Irritant effect on the eye:
- Not determined

Irritant effect on the skin:
- Not determined

Sensitisation:
- Not determined

Mutagenicity:
- Not determined

Reproductive toxicity:
- Not determined

Carcinogenicity:
- Not determined

12. Ecological information

Fish toxicity:
- Not determined

Daphnia toxicity:
- Greater than 1000 mg/litre, 48 hours, Daphnia magna, EC 50

COD:
- Not determined

BOD 5:
- Not determined

AOX advice:
- The product contains organically bound Halogen

2006/11/EC:
- Yes

Do not allow to enter drains or watercourses

13. Disposal considerations

- Wastes, including empty containers, are controlled wastes and should be disposed of in accordance with local regulations
- Dispose of as hazardous waste
- Waste number is 160504 – gasses in pressurized containers (including halons) containing dangerous substances

Continues on the next page.

14. Transport information

Shipping name and classification:
- UN 1950 Aerosols 2.1 Code: 5F

Label:

ADR LQ:
- LQ2 1l

ADR 1.1.3.6 (8.6):
- Transport category (tunnel restriction code): 2 (D)

IMDG classification:
- UN 1950 Aerosols 2.1

EMS:
- F-D, S-U

Label:

IATA classification:
- UN 1950 Aerosols, flammable 2.1

IMDG LQ:
- LQ: 11

Label:

15. Regulatory information

Hazard symbols:

EXTREMELY FLAMMABLE

HARMFUL

Contains:
- Methylenediphenyl Diisocyanate

R phrases

R 12:	Extremely flammable
R 36/37/38:	Irritating to eyes, respiratory system and skin
R 40:	Limited evidence of a carcinogenic effect
R 42/43:	May cause sensitization by inhalation and skin contact
R 48/20:	Harmful – danger of serious damage to health by prolonged exposure through inhalation
R 53:	May cause long term adverse effects in the aquatic environment
R 64:	May cause harm to breastfed babies

S phrases

S 23.3:	Do not breathe vapour
S 36/37:	Wear suitable protective clothing including gloves
S 45:	In case of accident or if feeling unwell, seek immediate medical attention. Show the label where possible
S 51:	Use only in well ventilated areas
S 56:	Dispose of the product and its container as hazardous waste

Special labelling:
- Pressurised container
- Protect from direct sunlight and temperatures above 50°C
- Do not pierce or burn container even after use
- Do not spray onto a naked flame or incandescent material
- Keep away from sources of ignition
- Avoid smoking
- Keep out of the reach of children
- CONTAINS ISOCYANATES
- OBSERVE MANYFACTURER'S INSTRUCTIONS

Persons already sensitized to isocyanates may develop allergic reactions when using this product. Persons suffering from asthma, eczema or other skin conditions should avoid contact, including dermal contact, with this preparation. 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 EN 14387) is used.

ECC regulations

1967/548 (2008/58, 30. ATP/31. ATP), 1991/689 (2001/118), 1999/13, 2004/42, 648/2004, 1907/2006 (REACH).

Transport regulations

DOT Classification, ADR (2009), IMDG code (34. Amdt), IATA DGR.

National regulations (GB)

EH40 /2005 Workplace exposure limits with amendments October 2007. CHIP 3/CHIP 4.

16. Other information

R-phrases

R 42/43: May cause sensitization by inhalation and skin contact
R 66: Repeated exposure may cause skin dryness or cracking
R 64: May cause harm to breastfed babies
R 50/53: Very toxic to aquatic organisms, may cause long term adverse effects in the aquatic environment
R 48/20: Harmful – danger of serious damage to health by prolonged exposure through inhalation
R 36/37/38: Irritating to eyes, respiratory system and skin
R 12: Extremely flammable
R 20: Harmful by inhalation
R 40: Limited evidence of a carcinogenic effect

Volatile organic content:

- 15 – 22%

This safety data sheet should be used in conjunction with technical data sheets. It does not replace them. The information given is based on our knowledge of this product, at the time of publication. It is given in good faith. The attention of the user is drawn to the possible risks incurred by using the product for any other purpose than that for which it was intended. This does not in any way excuse the user from knowing and applying all the regulations governing his activity. It is the sole responsibility of the user to fulfil his obligations regarding the use of hazardous products. This information is not exhaustive. This does not exonerate the user from ensuring that legal obligations, other than those mentioned, relating to the use and storage of the product, do not exist. This is solely his/her responsibility.

firebreak®
Fire Safety by Design

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