



# Abesco FR Foam

## Material Safety Data Sheet

### 1. PRODUCT AND COMPANY IDENTIFICATION

**Trade Name** Abesco FR Foam  
**Supplier** Abesco Ltd  
**Address** Laurencekirk Business Park  
Laurencekirk  
AB30 1EY  
**Phone Number** +44 (0)1561 377766  
**Fax Number** +44 (0)1561 378887

### 2. COMPOSITION / INFORMATION ON THE COMPONENTS

Substance	EINECS	CAS	Range (%)	Symbol
Dimethyl ether	204-065-8	115-10-6	5 - < 20	F+ 12
4,4'-Methylenediphenyl diisocyanate	202-966-0	101-68-8	5 - < 25	Xn 20-36/37/38-42/43
1,1,1,2-Tetrafluoro ethane	212-377-0	811-97-2	5 - < 25	

### 3. HAZARD IDENTIFICATION

R12: Extremely flammable. R36/37/38: Irritating to eyes, respiratory system and skin. R42/43: May cause sensitisation by inhalation and skin contact.

### 4. FIRST AID MEASURES

**General Information** Remove contaminated soaked clothing immediately and dispose of safely.

**First Aid – Inhalation** Ensure supply of fresh air. In the event of symptoms refer for medical treatment.

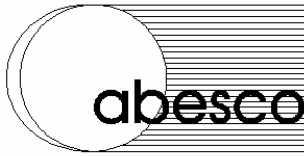
**First Aid – Skin Contact** In case of contact with skin wash off immediately with soap and water. Consult a doctor if skin irritation persists.

**First Aid – Eye Contact** In case of contact with eyes rinse thoroughly with plenty of water and seek medical advice.

**First Aid – Ingestion** N/A

**Advice to Doctor** Treat symptomatically.

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### 5. FIRE FIGHTING MEASURES

**Suitable extinguishing media**

Carbon dioxide. Dry powder. Foam. Water spray jet.

**Extinguishing media that must not be used**

Full water jet.

**Special exposure hazards arising from the substance or preparation itself or combustion products**

Risk of formation of toxic pyrolysis products. Hydrogen cyanide (HCN). Nitrogen oxides (NOx). Hydrogen chloride (HCl).

**Special protective equipment for fire-fighters**

Use self-contained breathing apparatus. Do not inhale explosion and/or combustion gases.

**Additional information**

Cool containers at risk with water spray jet. Fire residues and contaminated fire fighting water must be disposed of in accordance with the local regulations.

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### 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions**

Ensure adequate ventilation. Keep away sources of ignition.

**Environmental precautions**

N/A

**Methods for cleaning up/taking up**

Take up mechanically. Dispose of absorbed material in accordance with the regulations.

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### 7. HANDLING AND STORAGE

**Advice on safe handling**

Use only in well-ventilated areas.

**Advice on protection against fire and explosion**

Keep away from sources of ignition - refrain from smoking.

**Requirements for storage rooms and vessels**

Additional informations (15).

**Advice on storage compatibility**

Do not store together with oxidizing agents.

**Further information on storage conditions**

Protect from heat/overheating. Keep in a cool place, heat causes increase in pressure and risk of bursting.

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### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Additional advice on system design

Ingredients with occupational exposure limits to be monitored

Substance	CAS	Value
1,1,1,2-Tetrafluoro ethane	811-97-2	MAK: 1000 ppm, Y 2000
4,4'-Methylenediphenyl diisocyanate	101-68-8	MAK: 0,05 mg/m <sup>3</sup> BAT, 2000
Dimethyl ether	115-10-6	MAK: 1000 ppm 2000

<b>Respiratory protection</b>	Breathing apparatus in the event of high concentrations. Short term: filter apparatus, combination filter A-P2.
<b>Hand protection</b>	Protective gloves.
<b>Eye protection</b>	Safety glasses.
<b>Skin protection</b>	Light protective clothing.
<b>General protective measures</b>	Avoid contact with eyes and skin. Do not inhale vapours.
<b>Hygiene measures</b>	At work do not eat, drink, smoke or take drugs. Wash hands before breaks and after work. Clean skin thoroughly after work, apply skin cream. Use barrier skin cream.

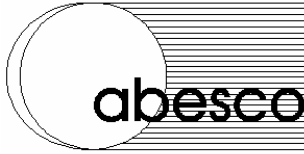
### 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Form</b>	Aerosol.
<b>Odour</b>	Characteristic
<b>pH</b>	Not applicable
<b>Flash Point (°C)</b>	Not applicable
<b>Combustible properties</b>	No
<b>Vapour pressure (hPa)</b>	-(20c)
<b>Auto-flammability</b>	(20c)
<b>Solubility in water</b>	Insoluble
<b>Viscosity</b>	Not applicable

### 10. STABILITY AND REACTIVITY

<b>Hazardous reactions</b>	Because of the high vapour pressure, containers are liable to burst if temperature rises.
<b>Hazardous decomposition products</b>	No hazardous decomposition products known.

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### 11. TOXICOLOGICAL INFORMATION

Acute oral toxicity	LD50
Acute dermal toxicity	LD50
Acute inhalational toxicity	LC50
General remarks	No toxicological data are available. The product was classified on the basis of the calculation procedure of the preparation directive (88/379/EEC).

### 12. ECOLOGICAL INFORMATION


Biodegradable	Not applicable.
Behaviour in sewage plant	Not applicable.
AOX-advice	The product contains organically bound halogen in accordance with the formulation.
General information	Ecological data are not available.
Contains compounds of 76/464/EC	Yes

### 13. DISPOSAL

Product / Container	Dispose of as hazardous waste.
Disposal	
Waste no.	160504*
Disposal / Contaminated packaging	Uncontaminated packaging may be taken for recycling. Packaging that cannot be cleaned should be disposed of as for product.

### 14. TRANSPORT INFORMATION

#### 14.1 Classification according to ADR:

ADR	2 5F	(2 F)
Dangerous Goods	1950 Aerosols 2 5F ADR	
Declaration:	(1950 Aerosols 2 F ADR)	
Inscriptions:	UN 1950 Aerosole	
Factor(ADR 10 011):	3,33	
Label:		

#### ADR-Conditions for limited quantities (LQ):

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**Dangerous Goods** "----"  
**Declaration:**  
**Inscriptions:** UN 1950  
**Label:** "----"  
**Inner packing, max.:** 1 l  
**Total gross mass of a package:** 30 kg

### 14.2 Classification according to IMDG:

**IMDG-Code:** Class: 2, Packing Group: -  
**Dangerous Goods** Aerosols, Class: 2, UN 1950, -  
**Declaration:**  
**Inscriptions:** Aerosols UN 1950  
**Label:**



### IMDG-Conditions for limited quantities (LQ):

**Dangerous Goods** Aerosols, Class: 2, UN 1950, -,  
**Declaration:** LIMITED QUANTITIES  
**Inscriptions:** Aerosols UN 1950  
**Label:** "----"  
**Inner packing, max.:** 1 l  
**Total gross mass of a package:** 30 kg

### 14.3 Classification according to IATA:

**IATA-DGR:** Class: 2.1 , Packing Group:  
**Dangerous Goods** Aerosols, flammable, Class: 2.1 , UN 1950,  
**Declaration:**  
**Inscriptions:** Aerosols, flammable UN 1950  
**Label:**



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### 15. REGULATORY INFORMATION

**Labelling** The product is classified and labelled in accordance with EC directives

**Hazard symbols**



**Extremely flammable**



**Harmful**

**Contains** 4,4'-Methylenediphenyl diisocyanate

R12: Extremely flammable. R36/37/38: Irritating to eyes, respiratory system and skin. R42/43: May cause sensitisation by inhalation and skin contact.

S23.3: Do not breathe vapour. S36/37: Wear suitable protective clothing and gloves. S51: Use only in well-ventilated areas. S45: In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). S56: Dispose of this material and its container to hazardous or special waste collection point.

**Special labelling for certain preparations**

Container is under pressure. Protect from sun and temperatures above 50 °C. Do not open with force or incinerate even after use. Do not spray against an open flame or glowing hot objects. Keep away from sources of ignition - No smoking. Keep out of reach of children. Observe manufacturer's instructions.

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### 16. OTHER INFORMATION

**02. Composition / Information on ingredients, (R phrases):**

R12: Extremely flammable.  
R20: Harmful by inhalation.  
R36/37/38: Irritating to eyes, respiratory system and skin.  
R42/43: May cause sensitisation by inhalation and skin contact.

**Regulatory information**

- \*91/155/EWG (2001/58/EG)
- \*67/548/EWG (2001/59/EG)
- \*88/379/EWG (2001/60/EG)
- \*91/689/EWG (2001/118/EG)
- \*89/542/EWG
- \*ADR (23.07.01)
- \*ADR (23.07.01)
- \*IMDG-Code (30.Amdt.)
- \*IATA-DGR (2001)

**Modified position:**

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