

1 Identification of the chemical and responsible company

1.1 Product identification

Description	Variant / packing	Part number
Forrex AB-30	Can w. 3,5 litre	57-1041-23
Forrex AB-30	Can w. 7 litre	57-1041-17
Forrex AB-30	Can w. 10 litre	57-1041-20
Forrex AB-30	Can w. 25 litre	57-1040-25
Forrex AB-30	Barrel w. 200 litre	57-1040-02
Forrex AB-30	Container w. 1000 litre.....	57-1040-00

Field of application

For use in Fire Extinguishers and Fire Suppression Systems.

1.2. Company Information

Distributor:

Name: Dafo Brand AB
Address: Box 683
135 26 Tyresö
Sweden
Tel.: +46 (0)8 506 405 00
Fax: +46 (0)8 506 405 99
E-mail: info@dafo.se

1.3. Emergency number

Contact local poison information centre

2 Information about chemical composition

Name of ingredient	EU-no.	CAS-no.	Cons. weight %	Health class
Ethylene glycol	203-473-3	107-21-1	25-35 %	Xn, R22
Calcium Chloride.....	233-140-8.....	10043-52-4	1-5 %	Xi, R36
Ethanol.....	200-578-6.....	64-17-5	<1 %	F, R11

3 Hazardous identification



Harmful

May cause irritation to skin and eyes. Ingestion may cause nausea, vomiting and diarrhoea.



Material Safety Data Sheet

Extinguishing agent Forrex AB-30

Revision 1:1	Valid from 06-12-11	Page 2 av 5
File SDS Forrex AB-30 Engelska Engelska		
Part number 57-104x-xx		

4 First aid measures

General.....	Move the patient away from the hazardous material as soon as possible. Keep the patient calm, warm and provide fresh air. If the patient is unconscious, but is breathing, make sure to keep breathing ways open and lay the patient in stable side position. Give respiratory aid if patient is not breathing and seek medical advice immediately.
Eye contact.....	Flush immediately with a soft flow of body temperature water for at least ten minutes holding the eyelids apart. Remove Contact lenses. Continue to flush for at least 15 minutes, contact a Medical doctor.
Skin contact.....	Remove contaminated clothing as well as wristwatch etc. Wash skin thoroughly with soap and clean gently flowing water. Use skin cream to replace loss of natural skin fat. If persistent irritation occurs seek medical advice.
Inhalation	Read items under "General". At sign of loss of consciousness or other symptoms, a physician must be contacted.
Ingestion.....	DO NOT INDUCE VOMITING. Rinse mouth with water and give 1-2 glasses of water to drink if the patient is conscious.
Medical information ..	If any symptoms persist seek medical advice and treat symptomatically.

5 Fire fighting measures

The product itself mixed with water is a fire fighting agent.	
Special hazards	The agent should be removed from equipment sensible for corrosion after the fire fighting operation.
Methods of fire fighting.....	N/A
Suitable fire fighting agents.....	N/A
Not suitable methods:	The agent should normally not be used to electrical equipment.

6 Accidental release measures

Personnel.....	Provide good ventilation, keep unauthorized persons away. Do not breathe mists, aerosols. Avoid contact with eyes, skin and clothing. Use necessary protective aid/clothing. Waste agent can make the surface slippery.
Environmental.....	Seal off the spill area with absorbing materials to avoid spreading of release to water or water treatment systems. Shovel up the absorbed material and place it in a labelled, sealed container for subsequent disposal. The practice of washing into drains should be avoided.
Clean-up.....	Stop the leakage if possible without risk. Spill can be pumped or absorbed into dry, inert material such as sand or soil etc. Contained material should be stored in sealed, marked containers and should be treated as indicated under clause 13 "Disposal Considerations".



Material Safety Data Sheet

Extinguishing agent Forrex AB-30

Revision 1:1	Valid from 06-12-11	Page 3 av 5
File SDS Forrex AB-30 Engelska Engelska		
Part number 57-104x-xx		

7 Handling and storage

Handling precautions. The product is a premix and should be used as supplied. Avoid skin and eye contact. Use personal protective equipment according to section 8. Avoid spill around the containers, the material may be slippery.

Storage precautions.... Product should be stored in sealed, original containers. Freezing and thawing do not affect the properties but care must be taken to avoid freezing of the container and its contents since the expansion of the container contents may cause cracking of the completely rigid container as ice forms.

8 Exposure controls and personal protection

Occupational Exposure Limit

Pure ethylene glycol (vapour):...Occupational Exposure Standard (OES)
Long term exposure limit (8 hour time weighted average) : 60 mg/cu.m
Short term exposure limit (10 minutes) : 125 mg/cu.m

Preventive measures:Keep good hygiene. Remove contaminated cloths. Do not keep towels etc saturated with the product in pockets. Emergency eye flush and emergency shower should be installed at the working area. Use only in well ventilated areas.

Prot. breathing equipment:At repeated exposure, use gas filter A/P2 (organic gases and dust). Use breathing apparatus or fresh air masks when working in areas with low oxygen.

Eye protection:Wear safety goggles of an approved type (e.g. BS 2092) or face screen.

Hand protection:Use protective gloves of an approved type (e.g. Butyl rubber EVOH, Neoprene).

9 Physical and chemical properties

Type of material..... clear liquid	Flash point..... > 98 °C
Smell..... organic odour	Density ca 1,11-1,13 kg/litre
Colour clear pale yellow	Solubility..... 100%
Freeze point..... -30 °C	pH % 6,5-8,5
Boiling point..... 100 °C	

10 Stability and reactivity

Stability:..... The product is stable under normal storage and use.

Conditions to avoid:..... Stock temperature below -30 °C and over +60 °C. The product can be stored in temperatures up to 80 °C for short periods.

Reacts with:..... Oxidizing materials.

Hazardous decompositions prod.: Irritating fumes from carbon monoxide.

11 Toxicological information

Eye contact:..... Vapours or spill into the eyes can cause irritation, redness, pain and discomfort.

Skin contact: Prolonged and repeated contact may cause irritation and dry skin.

Inhalation: Inhalation of hazardous amounts is unlikely.

Ingestion: Low oral risk when used as intended. Can give some irritation in the mouth, throat and stomach. Nausea and vomiting can occur.

12 Ecological information

Biodegradability: The product is biodegradable.

Bioaccumulation: The product is not expected to bio accumulate due to metabolism and excretion.

13 Disposal considerations

Waste should be disposed via local authority waste collection service or registered waste carrier ensuring that the destination is a licensed facility. All packaging shall be emptied and removed according to regulations, or be re circulated without removal of labelling.

Local Legislation: Control of Pollution act 1974, Special Waste Regulation 1996

14 Transport information

Not classified as Dangerous or hazardous for transport under UN, IMO, ADR/RID and IATA/ICAO – regulations. Handle the storage cans with care.

15 Regulatory information

The product is classified as in sanitary.

Marking:..... Faro symbol Xn (harmful)

Risk phrase:..... R22 - Harmful if swallowed

Protective phrase..... S2- Keep away from children

S46 – If swallowed, immediately contact a doctor and show this package or label.



Harmful

Includes ethylene glycol

Dangerous for life & kidney damage if swallowed.

Health and Safety at work Act 1974

Chemicals (Hazard Information & Packaging for supply) Regulations 1994 / Amendment 1996

EC Directives: Substance Directive 67/548/EEC as amended by 69/81/EEC, 75/409/EEC, 79/831/EEC General

Preparations Directive 88/379/EEC.

Classification and Labelling of Substances and Preparations Dangerous for Supply.

Transport of Dangerous Goods: ADR, RID, IMDG and IATA

Guidance Notes: Occupational Exposure Limits EH40/96

Note: EH40 is revised on an annual basis and latest issue should therefore be applied.



Material Safety Data Sheet

Extinguishing agent Forrex AB-30

Revision 1:1	Valid from 06-12-11	Page 5 av 5
File SDS Forrex AB-30 Engelska Engelska		
Part number 57-104x-xx		

16 Other information

INFORMATION SOURCES

Datasheet from the suppliers

Work protection agency information pamphlet about protective equipment

Work protection agency information pamphlet about gloves

“What you Need to know when you use protective breathing equipment” (Information, order number.: 539, Work protection agency)

Sax, N.I. and R.J. Lewis, Sr: Dangerous Properties of Industrial Materials, Seventh Edition, Volumes 1 to 3 (1991).

DISCLAIMER: This information is based on our current knowledge and is intended to describe the product for the purpose of health, safety and environmental requirements. The product should not be used for purposes other than fire fighting. The user is responsible for ensuring that requirements of relevant legislation are complied with.