ABERDEEN FOAM VAPOUR SHIELD (ACID) C6

VAPOUR SUPPRESSING AQUEOUS FILM FORMING FOAM

A high quality vapour suppressing Aqueous Film Forming Foam (AFFF) concentrate which is compliant with the EPA 2010/15 PFOA Stewardship Programme (see below).

Designed to provide an effective and stable vapour suppressing foam blanket on acid spills when used at 6% concentration.

Can also be used at 3% concentration to quickly extinguish and secure fires involving both:

- Class B hydrocarbon fuels such as crude oil, gasoline, aviation kerosene and fuel oil
- Polar solvents and water miscible liquids such as alcohols, ketones, aldehydes and ethers.

Formulated for use with either fresh or seawater, Aberdeen Foam Vapour Shield (Acid) C6 triple capabilities reduces the need to stock different foam types.

HOW IT WORKS

Many chemicals can destroy foam by combining with the surfactants used in its formulation, changing its pH or removing water by reaction or dissolution. Vapour Shield (Acid) C6 has been specially formulated to work effectively with acids without out any adverse reaction.

When used at a concentration of 6%, Vapour Shield (Acid) C6 provides a stable, slow draining foam to effectively suppress vapours from accidental acid chemical spills.

C6 & THE EPA 2010/15 PFOA STEWARDSHIP PROGRAMME

All traditional Fire Fighting Foams contain fluorosurfactants. Fluorosurfactants aid fire extinguishment and support excellent burnback properties.

However, a USA EPA working group has found that fluorosurfactants containing R_f carbon chain length greater than C6 could potentially degrade in the environment and form PFOA, a chemical which is bioaccumulative, toxic and persistent.

Due to this discovery, in 2005 the EPA convened what has come to be known as the **2010/15 PFOA Stewardship Programme**. Under this programme, all fluorosurfactant manufacturers worldwide have committed to withdraw from sale any fluorosurfactant with a carbon chain length greater than C6 by 2015.

In the Fire Fighting Foam manufacturing industry, this means that all manufacturers are required to reformulate and retest their foam concentrates by 2015.

Aberdeen Foam Vapour Shield (Acid) C6 has been developed and specially reformulated to meet the requirements of the 2010/15 PFOA Stewardship Programme.

For further information, please contact Oil Technics Ltd.

EPA 2015 COMPLIANT

VAPOUR SHIELD (ACID) C6

PHYSICAL PROPERTIES

Appearance	Viscous straw liquid
Specific gravity	1.02
pH at 20°C	7 - 8
Viscosity @ 20°C mPas	Non-Newtonian
Surface tension @ 20°C N/m	0.019
Freezing point (°C)	-3
Lowest use temp. (°C)	2
Expansion (at 3%)*	≥ 6.0
25% drainage (at 3%)	≥ 8.0 minutes
Max. storage temp.(°C)	49
Min. storage temp.(°C)	1.7
Freeze/thaw effect	None

* Foam quality will depend on the foam equipment used and the operating conditions. The above are tested in accordance with UK Defence Standard 42-40 Low Expansion branch.

FOAMING PROPERTIES

Foam expansion properties will vary depending on several factors including:

- Using salt or fresh water
- Water hardness
- Equipment characteristics
- Equipment flow rate

For example, aspirating devices will produce typical expansion ratios of between 6:1 and 10:1 and non-aspirating devices between 2:1 and 4:1.
Always check your equipment's operation manual for guidance.

ENVIRONMENTAL IMPACT

- Contain no fluorosurfactants of chain length greater than C6
- Biodegradable
- Butyl carbitol free
- Low fluorine content
- Low toxicity to aquatic organisms

APPLICATIONS

Aberdeen Foam Vapour Shield (Acid) C6 concentrate provides quality protection wherever acid spills are a risk:

- Road tankers and rail cars
- Chemical storage facilities
- Industrial processing areas

Also suitable for use as a fire fighting foam on Class B Hydrocarbon and Polar Solvent fuel fires or as a wetting agent for combating Class A fires (i.e.tyres, paper, wood).

MINIMUM FOAM BLANKET THICKNESS

Ideally 350mm at 50:1 expansion.

PROPORTIONING EQUIPMENT

Aberdeen Foam Vapour Shield (Acid) C6 concentrate is readily proportioned with the following equipment:

- In-line inductors (fixed or portable)
- Balanced pressure variable flow proportioners
- Around the pump proportioners
- Bladder tank Balanced Pressure proportioning skid
- Handline, aspirating nozzles with fixed inductor pickup tube

DISCHARGE EQUIPMENT

For Vapour Suppression, apply with a medium expansion nozzle. Also suitable for use at 3% concentration with:

- Foam chambers
- Aspirating and non-aspirating sprinklers or spray nozzles
- Water fog nozzles for handlines and monitors
- Foam makers for use with either Floating Roof or Bund Protection systems

PROPORTIONING INFORMATION

Vapour suppression:

- 6 parts foam concentrate to 94 parts water

Hydrocarbon fires:

- 3 parts foam concentrate to 97 parts water

Polar solvent fires:

- 3 parts foam concentrate to 97 parts water

STORAGE AND SHELF LIFE

Best stored as supplied in original, unopened containers. Suitable for storage in containers and tanks manufactured from:

- Stainless steel (Type 304L or 316L)
- High density cross-linked polyethylene
- RFP – vinyl ester epoxy resin only

If kept in the original manufacturer's supplied container and stored between 1.7°C and 49°C, a shelf life of at least 10 years can be expected.

To prolong the shelf life of any AFFF, do not expose to temperature extremes and prevent contamination from foreign materials.

COMPATIBILITY

Our laboratory tests have shown Aberdeen Foam Vapour Shield (Acid) C6 concentrate is compatible in all proportions with other high quality alcohol resistant aqueous film forming foams and ABC and BC fire fighting powders.

However, in order to maintain EPA 2010/15 compliancy, it is recommended that **C6 foams are not mixed with any other foams.**

As recommended by NFPA 11, we would advise that if mixing foam concentrates from different manufacturers a compatibility study is carried out beforehand.

Never mix with any other foam type.

For further information or advice on compatibility testing, please contact Oil Technics Limited.

DISPOSAL

Produced Aberdeen Foam Vapour Shield (Acid) C6 can be safely disposed of in biological waste water treatment systems.

INSPECTION AND TESTING

As recommended by NFPA11, BS:EN 13565-2:2009 and BS 5306, Aberdeen Foam foam concentrates should be inspected and tested at least annually as part of your fire fighting foam maintenance programme.

Oil Technics Limited offers a worldwide foam testing service and inhouse foam testing training. For further details, please contact us or visit our website: www.foamtesting.com

TECHNICAL SERVICES AND SALES SUPPORT

For our UK customers, Aberdeen Foam is available 24/7 via our 24 hour emergency call out service: +44 (0) 1561 361515

Aberdeen Foam is manufactured in Scotland under ISO 9001 and ISO 14001 accredited management systems and audited by UL every four months.

PACK SIZES

Available in the following sizes:
20 litre, 25 litre, 200 litre, 1000 litre containers and bulk tanks

ABERDEEN FOAM

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