Overview

Alcohol resistant aqueous film forming foam (AFFF AR) concentrates are high performance synthetic foam agents comprised of surfactant, fluorosurfactant, polymer and fluoropolymer suited for use on class B fires such as hydrocarbons and polar solvent fuels. Unlike standard AFFF agents their alcohol resistant properties means that AFFF AR agents are also effective on water miscible fuels such as alcohols and other polar solvents.

The versatility of AFFF AR agents means that they are used in situations that cover a variety of risk, especially where protection is required against both hydrocarbon and polar solvent fires. Typical industries would include high risk sectors such as oil and gas and chemical manufacturing.

Performance

AFFF AR is ideally suited for quick extinguishment of large scale class B fires involving hydrocarbon fuels such as oil, petroleum and aviation fuels where it can be used either under soft or forceful application (Type I and II).

AFFF AR foams are uniquely used on polar solvent fires such as alcohol or acetone where it should be applied in a gentle indirect method using foam deflectors to allow an effective polymer layer and film to form on the fuel surface.

On application, the foam spreads rapidly to form firstly a polymer layer and additionally an aqueous film above. The polymer layer and aqueous film prevents the release of fuel vapours. The foam blanket effectively excludes oxygen from the fuel surface, extinguishing the fire and preventing re-ignition. Additionally it provides a cooling function on the fuel by enclosed water and makes the water float on fuel surfaces in spite of its usually higher density. On polar solvent fires the polymer layer is primarily designed to protect the foam from being broken down by the water miscible fuel.

Applications

Alcohol resistant aqueous film forming foams are used wherever it is essential to extinguish a fire rapidly to save human lives and to avoid high material losses.

The versatility of AFFF AR agents, allowing them to be used on both hydrocarbon fires and polar solvent fires, means that they are most commonly used in areas where mixed risks are present. In particular, chemical plants, refineries, ships, drilling rigs, tank farms and other storage depots where a wide range of risks may be present.

Use of AFFF AR foams in such situations can benefit the user as the same concentrate and equipment can be used for a range of applications, saving on both storage capacity and hardware capital expenditure costs.
Usage

AFFF AR concentrates can be used with a wide range of fire fighting equipment, both in standard water spray and through most conventional foam equipment. These include: sprinklers, monitors, foam generators, foam branchpipes, handlines and foam chambers.

AFFF AR can be proportioned within all standard mixing systems such as:

- Balance pressure pump proportioning equipment
- Bladder tank and related proportioners
- Around-the-pump proportioners
- Fixed and portable in-line venturi type inductors
- Nozzles with built-in induction/pick up tubes

Approvals

SKUM is wholly committed to approving our agents to the latest industry standards. SKUM AFFF AR agents are tested at internationally recognised test facilities and approved to the standards most appropriate to that industry, application and risk.

Varieties

Offering a wide choice of different concentrations, packaging capacities and approval types, SKUM manufactures AFFF AR agents to address a wide range of applications at our proprietary manufacturing facility in Levate, Italy.

SKUM Foam solutions

As a brand ‘SKUM’ is synonymous with fire-fighting foam:- SKUM literally means foam in Swedish.

From its foundation in Sweden in the 1930’s SKUM has become the global standard of foam fire suppression in high-risk, high-stake industries.

SKUM offers a complete range of foam agent concentrates designed with performance, efficiency and environmental impact in mind. Products are tested at internationally recognised facilities and approved to the standards most appropriate to that industry, usage and risk.

As a manufacturer of both foam hardware and foam agents, SKUM is able to supply single component needs as well as complete end-to-end systems. An unrivalled history of fire suppression experience and a dedicated Foam Technical Service Team mean that SKUM is happy to address and confident to meet any customer fire-fighting foam requirement.