



PRODUCT SHEET



IFP UNILIGHT AR-AFFF TYPE 3/3^{C6} (SELF-HEALING)

Alcohol Resistant Aqueous Film Forming Foam Concentrate

Description

IFP UNILIGHT AR-AFFF TYPE 3/3^{C6}, (SELF-HEALING), commonly known as Alcohol Resistant Aqueous Film Forming Foam Concentrate, is specially formulated non-toxic, viscous foam liquid concentrate, for use in hydrocarbon as well as polar solvent fires. The foam concentrate contains special type of fluorochemical surfactant (C6 technology), hydrocarbon surfactant, solvent, stabilizer, biocide and polysaccharides. It produces aqueous film on hydrocarbon fuel to prevent the fuels vapors come in contact with air and forms a cohesive and regenerative polymeric barrier floats over the alcohol preventing the foam bubble for mixing with polar solvents. IFP UNILIGHT AR-AFFF TYPE 3/3^{C6} do not contains any PFOS, PFOA or its derivatives.

Properties

Appearance	Light Orange Viscous Liquid
pH	7.0 - 8.0
Specific Gravity	1.00 to 1.03 gm/ml
Viscosity	Non-Newtonian
Spreading Co-efficient	More than 3.5
Sludge Contents (% V/V)	Nil
Pour Point	(-) ² °C

Application

IFP UNILIGHT AR-AFFF TYPE 3/3^{C6} is intended for use on Class B hydrocarbon fuels such as gasoline, kerosene, diesel etc. and polar fuels such as alcohols, aldehydes, ketones, ethers, esters etc. at a proportioning rate of 3% with fresh water and salt water. It is applicable with low and medium expansion discharge devices for covering and extinguishing fires of Class A and Class B. IFP UNILIGHT AR-AFFF TYPE 3/3^{C6} is suitable for use in special appliances like storage tanks, process areas, warehouses, loading areas, docs and other local risks involving a spilled fuel fire. It is a multipurpose foam and therefore it gives maximum protection against hazards in the fuel storage area irrespective of the type of the fuel.

Minimum Application Rates listed in UL Directory using 50 ft2 Fire Test on hydrocarbon and polar solvent fuels are listed below.

Fuel	gpm/ft ² (lpm/m ²)
Polar Solvents (U.L. Type II Application)*	
Methanol	0.10 (4.1)
Ethyl Alcohol	0.10 (4.1)
Isopropyl Alcohol	0.10 (4.1)
Isopropyl Alcohol	0.13 (5.3)
Isopropyl Alcohol	0.16 (6.6)
Methyl Ethyl Ketone	0.15 (6.1)
Acetone	0.16 (6.6)
Hydrocarbons (U.L. Type III Application)**	
Heptane	0.10 (4.1)

* TYPE II APPLICATION - Discharge devices that delivers foam gently onto the burning liquid but with minimized submergence and restricted agitation of the surface as described in UL 162.

** TYPE III APPLICATION - Discharge devices that delivers the foam directly onto the liquid surface as described in UL 162.

Proportioning

IFP UNILIGHT AR-AFFF TYPE 3/3^{C6} can easily be proportioned using conventional equipments

- Fixed and Portable In-line Inductors
- Balanced Pressure and In-line balanced pressure proportioning systems.
- Bladder tank proportioner.
- Around the pump inductor.
- Handline nozzles with fixed induction/ pick-up tubes.

Discharge Devices

- Air aspirating discharge devices such as low expansion branchpipes, top pourer sets, rimseal foam pourers.
- Air aspirating and non air aspirating sprinkler heads and spray nozzles.
- Foam makers for use with Floating Roof Storage Tanks/Bund protection system.
- Non-aspirating discharge devices such as spray/fog branchpipes and nozzles, monitors. However, non-aspirated application is not recommended as the primary method of attack for major fires involved with polar fuels where a stable foam cover is essential.

Storage/Shelf Life

Shelf-life of IFP UNILIGHT AR-AFFF TYPE 3/3^{C6} is 10-15 years while stored in the supplied packing and stored within the temperature range of 1.7°C - 49°C (35°F - 120°F). Freezing and thawing will have no impact on the performance. For bulk storing materials like SS-304, SS-316, Isophthalic Polyester Resin, Epoxy Resin, High Density Polyethylene are recommended. Galvanized pipe and fittings must not be used in areas where undiluted concentrate will contact them since corrosion will result.

Compatibility

IFP UNILIGHT AR-AFFF TYPE 3/3^{C6} is compatible with soft, hard, brackish or salt water. It can be used in combination with Dry powder extinguishing agents either separately or as twin agent systems.

IFP UNILIGHT AR-AFFF TYPE 3/3^{C6} shall not be mixed with other manufacturers foam concentrate except for use in emergency situations.

Environmental and Toxicological Information

IFP UNILIGHT AR-AFFF TYPE 3/3^{C6} is biodegradable, low toxicity and does not contain PFOS. However, as with any substance, care should be taken to prevent discharge from entering ground water, surface water, or storm drains. It can be treated in sewage treatment systems. Since facilities vary widely by location, disposal or discharge of IFP UNILIGHT AR-AFFF TYPE 3/3^{C6} concentrate or foam solution should be made in accordance with local government rules and regulations.

For further details see IFP UNILIGHT AR-AFFF TYPE 3/3^{C6} Material Safety Data Sheet./Safety Data Sheet.

Approvals and Listing

- Bureau of Indian Standard, BIS Marked, as per IS 4989:2018
- Underwriter's Laboratories Inc., UL Listed (UL 162)
- EN approved, as per EN 1568-3&4
- Type approved Lloyd's Register, UK, as per IMO MSC.1/Circ. 1312
- IRS Type Approved

Standards

- FM 5130
- ISO 7203 - 1 & 3

Ordering Information

Part Number	Description	Volume, m ³ (ft ³)	Weight (kg)
102020-01	Pails/Cans 20L (5.28 Gallon)	0.028 (0.99)	21.4
102020-02	Pails/Cans 30L (7.93 Gallon)	0.040 (1.40)	32.1
102020-03	Barrels 200L (52.84 Gallon)	0.318 (11.23)	211.2
102020-04	IBC Tote 1000L (264.2 Gallon)	1.386 (49.09)	1167

Container capacity and seaworthy packing also complied with customers' requirements

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