

ALCOHOL RESISTANT AQUEOUS FILM FORMING FOAM CONCENTRATE (AR-AFFF)

HD AR-AFFF is a foam concentrate mainly used to extinguish alcohol containing polar solvent fires. AR-AFFF is also known as ARC (Alcohol Resistant Concentrate), ATC (Alcohol Type Concentrate), AGFFF (Aqueous Gel Film Forming Foam), MPF (Multipurpose Foam) or UF (Universal Foam). It exhibits quick fire control and is ideal for rapid extinguishment. The foam concentrate contains polysaccharide, which forms a pseudo plastic film on the surface of the polar solvents. It forms a cohesive thin polymeric film at the interface between foam and the water soluble Polar solvents. This thin polysaccharide film protects the foam without destroying the aqueous film by polar solvents. The polymeric film has self-adhering characteristics whereby the film, if disturbed, gets regenerated by itself. The foam forms an aqueous film like AFFF on surface of hydrocarbon solvents.

APPLICATIONS:

- HD AR-AFFF is available in type 3x6% concentrate or 3x3% concentrate.
- Available with 2 application densities:
 - Model: HD AR-AFFF - 0.24 gpm/sq.ft.
 - Model: HD S AR-AFFF - 0.18 gpm/sq.ft
- Can be used with fresh water as well as seawater.
- Also available as Freeze Protected type.
- Suitable for application with standard low expansion foam making equipments and fire suppression systems.
- Typical applications include storage tanks, loading racks, docks, process areas, warehouses, spills, etc.
- HD AR-AFFF is an ideal choice as a rapid effective extinguishing agent for fighting fires particularly of high risk areas like aviation, petrochemical complexes, refineries and tank terminals.

COMPATIBILITY:

HD AR-AFFF is compatible with all types of dry powders and equivalent foams.

SHELF-LIFE:

HD AR-AFFF has a minimum shelf life of 10 years in tropical conditions and if properly stored in its original container or tanks suitable for storage. Refer Technical Bulletin for storage condition guidelines.

STORAGE:

Storage temperature should be below 49 °C. The product can withstand intermittent, short time exposure up to 60 °C temp. Ensure containers are not directly exposed to sunlight & heat for a long period. It is unaffected by freeze/thaw cycles.

ECOLOGY:

HD AR-AFFF is environmentally safe. It is bio-degradable and low toxic to the aquatic organisms.

PHYSICAL PROPERTIES:

PROPERTY	3x3 %	3x6 %
APPEARANCE	Amber coloured viscous liquid	Amber coloured viscous liquid
pH @ 20°C	6.5 – 8.5	6.5 – 8.5
Sp. Gravity @ 20 °C	1.00 to 1.03	1.00 to 1.03
Freezing Point	1.7°C	1.7°C
Viscosity @ 20 °C	Non Newtonian fluid*	Non Newtonian fluid*
Sediment	Maximum 0.25%	Maximum 0.25%
**Expansion Ratio	≥7 : 1	≥7 : 1
**Drainage (25 %)	≥7 min	≥7 min

* AR-AFFF is a Non Newtonian fluid that is both pseudoplastic (shear thinning) and thixotropic

** Expansion & Drainage values depend on equipments, application conditions & application density.

PACKING:

UL recognized HDPE containers of 20, 30 Liters or 200 Liters.

DISPOSAL:

HD AR-AFFF can be successfully treated in biological waste water treatment systems. Local regulations put forth by the authorities having jurisdiction should be complied with for discharge in drainage/sewage systems.

LIMITED WARRANTY

HD FIRE PROTECT PVT. LTD. hereby referred to as HD FIRE warrants to the original purchaser of the fire protection products manufactured by HD FIRE and to any other person to whom such equipment is transferred, that such products will be free from defect in material and workmanship under normal use and care, for two (2) years from the date of shipment by HD FIRE. Products or Components supplied or used by HD FIRE, but manufactured by others, are warranted only to the extent of the manufacturer's warranty. No warranty is given for product or components which have been subject to misuse, improper installation, corrosion, unauthorized repair, alteration or un-maintained. HD FIRE shall not be responsible for system design errors or improper installation or inaccurate or incomplete information supplied by buyer or buyer's representatives.

HD FIRE will repair or replace defective material free of charge, which is returned to our factory, transportation charge prepaid, provided after our inspection the material is found to have been defective at the time of initial shipment from our works. HD FIRE shall not be liable for any incidental or consequential loss, damage or expense arising directly or indirectly from the use of the product including damages for injury to person, damages to property and penalties resulting from any products and components manufactured by HD FIRE. HD FIRE shall not be liable for any damages or labour charges or expense in making repair or adjustment to the product. HD FIRE shall not be liable for any damages or charges sustained in the adaptation or use of its engineering data & services. In no event shall HD Fire's product liability exceed an amount equal to the sale price.

The foregoing warranty is exclusive and in lieu of all other warranties and representation whether expressed, implied, oral or written, including but not limited to, any implied warranties or merchantability or fitness for a particular purpose. All such other warranties and representations are hereby cancelled.

NOTICE :

The equipment presented in this bulletin is to be installed in accordance with the latest publication standards of NFPA or other similar organisations and also with the provision of government codes or ordinances wherever applicable.

The information provided by us are to the best of our knowledge and belief, and are general guidelines only. Site handling and installation control is beyond our reach. Hence we give no guarantee for result and take no liability for damages, loss or penalties whatsoever, resulting from our suggestion, information, recommendation or damages due to our product.

Product development is a continuous programme of HD FIRE PROTECT PVT. LTD. and hence the right to modify any specification without prior notice is reserved with the company.



C-3/6, THE NANDANVAN IND. ESTATE, L.B.S. MARG, THANE 400 604, INDIA.
PHONE : +(91) 22 2582 6958, 2582 6793
FAX : +(91) 22 2581 2524, 6796 9049
EMAIL : info@hdfire.com
WEBSITE : www.hdfire.com