

# 1%**x**3% AR-AFFF (ALCOHOL RESISTANT AQUEOUS FILM FORMING FOAM) HD AR-AFFF 1X3-C6



## DESCRIPTION

HD AR-AFFF 1X3-C6 is an Alcohol Resistant Aqueous Film Forming Foam concentrate, specially formulated with new generation C6 based fluorinated surfactants which are environmentally safer.

HD AR-AFFF 1X3-C6 is formulated with C6 based Fluoro surfactants, Hydrocarbon surfactants, polysaccharides and solvents. It produces thin yet strong aqueous film on Hydrocarbon fuel surface, sealing the surface and preventing fuel vapour release.

The foam spreads rapidly on fuel surface due to positive spreading provided by fluoro surfactants while the foam blanket excludes oxygen from the fuel surface and provides cooling effect leading to fast flame knockdown and extinguishment.

Polysaccharide film is produced when the foam solution comes in contact with a water miscible polar solvent. This polymer film acts as raft to support the foam blanket on the surface of the polar fuel. Foam blanket cuts off oxygen from fuel surface and cools it thereby providing fast knockdown and fire extinguishment.

HD AR-AFFF 1X3-C6 is intended for use at 1% solution in fresh, sea/salt or hard water for hydrocarbon and 3% solution in fresh, sea/salt or hard water for polar solvents fires.

## APPLICATION

HD AR-AFFF 1X3-C6 is suitable for Class B fires of Hydrocarbons like crude oil, gasoline, diesel, aviation fuel, kerosene etc. and polar solvents like alcohols, ketones, esters, acetates etc. It is also recommended for aromatic hydrocarbon fires of benzene, xylene, toluene & their derivatives.

HD AR-AFFF 1X3-C6 can also be used as a wetting agent in combating fires in Class A materials such as wood, paper, and tyres.

## PROPORTIONING

HD AR-AFFF 1X3-C6 can be used with various types of Foam Proportioning & Discharge Devices such as Portable and Fixed Foam Proportioners, Branch Pipes, Foam Bladder Tanks, Ratio Controllers, Spray Fog Nozzles, Monitors, Foam Makers, Foam Chambers, Foam Pourers, Rim Seal Foam Pourers, Foam-Water Sprinklers etc.

## APPROVALS AND LISTINGS

UL Listed as per UL-162 standard

## COMPATIBILITY

HD AR-AFFF 1X3-C6 is compatible with dry powders and other equivalent foams.



## TYPICAL PROPERTIES

| PARAMETERS                          | VALUES                        |
|-------------------------------------|-------------------------------|
| Appearance                          | Viscous liquid (Amber Colour) |
| Specific Gravity @20°C (68°F)       | 1.02 ± 0.02                   |
| pH @ 20°C (68°F)                    | 8.0 ± 1.0                     |
| Viscosity @ 20°C (68°F), #4, 60 rpm | 1400 ± 200 cPs                |
| Pour Point*                         | Flows at 0°C                  |
| Expansion **                        | >7                            |
| 25% Drainage **                     | >5 min 30 secs                |

\* Also available in Freeze Protected Type

\*\* Value depends on equipment used and system parameters

## STORAGE AND SHELF LIFE

It has a shelf life of 10 years when stored in its original container. Storage temperature should be below 49°C. The product can withstand intermittent short time exposure up to 60°C. Ensure that the containers are not directly exposed to sunlight and heat. It is unaffected by freeze/thaw cycles. Refer Storage Conditions for additional information on storage.

## ENVIRONMENTAL INFORMATION

Being based on C6 fluoro surfactants, HD AR-AFFF 1X3-C6 is environmentally safer and low toxic to the aquatic organisms. It is bio-degradable.

Local regulations should be complied with for discharge into common drainage/sewage systems.

Refer MSDS for additional information.

## PACKAGING

The product is available in 20L Jerry Cans, 200L Drums, 1000 L Tote and bulk packing.

## 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 is to the best of our knowledge and belief, and consist of general guidelines only. Site handling and installation control is not in our scope. 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.



**HD FIRE PROTECT PVT. LTD.**  
Protecting What Matters Most to You

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