

HD FLUORO PROTEIN (FP) FOAM CONCENTRATE



FLUORO PROTEIN FOAM CONCENTRATE (FP3% and 6%)

HD FP is a protein based foam concentrate, which gives good sealing and excellent burn back resistance. As the spreading of the foam is slow, it is overcome by incorporating fluorinated surfactant in the formulation; without affecting heat stability. HD FP is formulated with hydrolysed protein, fluorochemicals, metal salts, special stabilizers and preservatives to give the best performance and satisfactory storage. It is highly reliable, cost effective and efficient on massive hydro-carbon fires. It gives resistance to fuel pick-up and is suitable for sub-surface applications.

HD FP is suitable for long pre-burn fires on petroleum tank Farm fires, oil jetties, refineries and offshore oil platforms.

APPLICATION:

- HD FP is available in 3 % and 6 % concentrate.
- It can be used with fresh water as well as sea water.
- It can be applied with the help of all types of nozzles, inductors, foam chambers etc.
- An ideal choice for sub-surface application as it is very highly resistant to the fuel pick up.
- HD FP is also available in freeze-protected range.

COMPATIBILITY:

HD FP is compatible with all types of dry chemical powders and equivalent foams

SHELF-LIFE:

HD FP has a minimum shelf life of 7 years considering tropical conditions and properly stored in its original container or tanks suitable for storage. Refer Technical Bulletin for storage condition guidelines.

APPROVALS:

UL listed by Underwriters Laboratory as per UL 162 standard.

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 FP is environmentally safe. It is bio- degradable and exceptionally low toxic to the aquatic organisms

The following tests can be conducted from NABL/ FDA Approved Laboratory, on request.

- Toxicity Certificate
- Skin Irritation Test
- Microbiological Analysis
- Biodegradability (BOD/COD)
- Aquatic Toxicity

PROPERTY	3%	6%
APPEARANCE	Dark brown coloured liquid	Dark brown coloured liquid
pH @ 20 °C	6.0 - 7.5	6.0 - 7.5
Sp. Gravity @ 20 °C	1.11 to 1.15	1.08 to 1.12
Freezing Point	-6.7 °C	0 °C
Viscosity @ 20 °C	Less than 30 cSt	Less than 30 cSt
Sediment	Maximum 0.5%	Maximum 0.5%
*Expansion Ratio	≥ 6 : 1	≥ 6 : 1
*Drainage (25 %)	≥ 4 min.	≥ 3 min. 30 sec.

* Expansion & Drainage values depend on the equipment & the application conditions.

PACKING:

UL recognized HDPE container of 20 L/ 30 L /200 L.

DISPOSAL:

HD FP can be successful treated in biological waste water treatment systems.

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

PLEASE NOTE:

The above data is given in good faith and for general guidelines only.

The right is reserved to vary or modify any specifications and parameters without prior notice.

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 specifications without prior notice is reserved with the company.

**HD FIRE PROTECT
PVT. LTD.**

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