

**With Technical Know-how from
Fire Fighting Systems
AB SWEDEN
and
IFP DENMARK**

IFP-INDIA Offers
IFP UNILIGHT AFFF TYPE 6
IFP UNILIGHT AFFF TYPE 3

APPROVALS AND MARKINGS :

- UL (Underwriters Laboratories Inc., USA) Listed as per UL 162 - File No. EX 5308
- LICENSED FOR CERTIFICATION MARKING BY BUREAU OF INDIAN STANDARDS
- Directorate General of Shipping MMD (MINISTRY OF SURFACE TRANSPORT, GOVERNMENT OF INDIA : MERCANTILE MARINE DEPARTMENT)

CONFORMING TO :

- ICAO. DOC. 9137-AN 898 (Part I)
- UK DEFENCE SPECIFICATION 42 - 40/ISSUE-1
- US MIL-F-24385
- ISO: 7203-1
- IMO: MSC/Circ. 582
- EN 1568 - 3

IFP UNILIGHT AFFF

TYPE 3 AND TYPE 6

IFP UNILIGHT AFFF, a non-toxic, clear liquid with no stratification or turbidity, is a fluoro-chemical foam concentrate, commonly known as **AQUEOUS FILM FORMING FOAM CONCENTRATE (AFFF)**, which represents a major advancement in foam technology for effective extinguishment of Class A and B fires, as Low and Medium expansion foam.

- **TYPES**

It is available in two types :

IFP UNILIGHT TYPE 6, to be used as 6 parts of concentrate to 94 parts of water v/v (6% Induction Rate)

IFP UNILIGHT TYPE 3, to be used as 3 parts of concentrate to 97 parts of water v/v (3% Induction Rate)

- **SUPERIOR FLAME KNOCKDOWN - SURFACE SEALING - RAPID RESCUE**

IFP UNILIGHT AFFF is formulated specially to have a superior knockdown performance on all types of hydrocarbon fires. The special surfactants used, produce a fast, positive spreading action over the fuel surface, thus giving a very rapid foam cover at a remarkably low application rate. These characteristics are most effective as rapid intervention steps against aviation and similar risks.

IFP UNILIGHT AFFF forms a vapour-sealing aqueous film on the surface of hydrocarbon fuel so that flammable vapours are fully suppressed with a thin foam cover. The inherent self-sealing property re-seals any disturbed surface of burning liquid, a great advantage in rapid rescue operations.

- **COMPATIBILITY**

IFP UNILIGHT AFFF is compatible with a wide range of conventional foams including most protein and fluoroprotein foams and can be applied simultaneously with other types of foams and dry powders for separate application, or as a twin-agent system.

- **PENETRATION QUALITY**

IFP UNILIGHT AFFF provides excellent penetration qualities as a wetting agent when used on Class A fires and is very effective in extinguishing deep-seated fires in Jute/Cotton Bales, Wood, Coal, Rubber and Plastic materials.

- **APPLICATIONS**

IFP UNILIGHT AFFF can be used with standard, conventional low/medium expansion foam-making equipments with fresh/sea/brackish water, either as a premixed solution or through foam induction systems. This unique quality of **IFP UNILIGHT AFFF** makes it suitable for use in special appliances like Crash Tenders/R.I.Vs/Monitors/Portable Foam Extinguishers etc. **IFP UNILIGHT AFFF**, applied into fixed water spray or sprinkler installations for protection of stores, ware-houses, tanker loading areas and other local risks involving a spilled fuel fire, has been found extremely effective. The use of **IFP UNILIGHT AFFF** in medium expansion fixed branch pipe installation systems for dyke/bundh protection in tank farms is also very effective. For sub-surface injection including hose-reel installations, **IFP UNILIGHT AFFF** has shown an excellent performance in dealing with fire risks in flammable liquid tank farms where immediate fire attack is essential to save life or to contain the spread of a major fire.

CHEMICAL PHYSICAL PROPERTIES & PERFORMANCE DATA

Type	Average Value		Method Applied
	6%	3%	
Appearance	Amber Colour Liquid		
pH (Hydrogen Ion Concentration)at 27°C	6.5 to 8.5		
Specific Gravity at 27°C	1.00 to 1.10		
Miscibility with :			
Distilled Water	Miscible		
Synthetic Sea Water	Miscible		
Viscosity at 27 °C	Less than 10.00 cst		
Surface Tension (dyn/cm)	Less than 17		
Spreading Co-efficient	More than 3		
Sludge Contents (% V/V)	Less than 0.1%		
Pour Point			
Foam Expansion Ratio at 27°C			
25% Drainage Time			
Film Formation	Conforming to relevant standard specification		
Resistance to burn back			
Fire Extinguishing Time			
Refractive Index			
Flash Point	No Flash		

- FOR EXTREME SUB-ZERO CONDITIONS :**

IFP UNILIGHT AFFF can be specially formulated for extreme sub-zero conditions where a concentrate is required to be 'freeze protected' to minus 30°C or even less.

- STORAGE :**

IFP UNILIGHT AFFF should be stored in plastic/plastic lined containers. For bulk storage, stainless steel or mild steel tanks with internal epoxy coating is recommended.

If stored in original container at below 50°C, an indefinite storage life can be expected. For a short period, maximum storage temperature up to + 65°C should not be harmful.

IFP UNILIGHT AFFF CONCENTRATE CAN BE DEFROZEN / THAWED WITHOUT CHANGE IN QUALITY

DUE TO CONTINUOUS R & D WORK, EFFECTS OF PRODUCT IMPROVEMENTS ARE INCORPORATED IN DATA SHEETS AS AND WHEN REQUIRED.