



Chemist of Fire Fighting

**S&P SAFETY PRODUCTS PVT. LTD.**



**Film Forming Fluoro  
Protein Foam**

**FFFP 3%**

**FFFP 6%**



## Film Forming Fluoro Protein Foam (FFFP)

- ♦ An expeditious flame knockdown.
- ♦ Rapid surface sealability.
- ♦ Environment friendly.
- ♦ Based on the latest C6 chemistry.
- ♦ Rapid foam cover at very low application rate.

### TYPES

- ♦ **SP FFFP 3** (FFFP 3%) 3 volumes of concentrate with 97 volumes of water (3% Induction Rate)
- ♦ **SP FFFP 6** (FFFP 6%) 6 volumes of concentrate with 94 volumes of water (6% Induction Rate)

### PRODUCT DESCRIPTION

**SP FFFP** is a nontoxic, biodegradable, either dark brown or reddish brown colour liquid with a specific odour, without stratification or turbidity and free from synthetic and harmful detergent. **SP FFFP** effectively extinguishes all water immiscible fuel fires as low and medium expansion foam. Special process of alkaline hydrolysis is used to create **SP FFFP** from its basic raw materials. **SP FFFP** is produced while following rigorous quality control standards to ensure ultimate reliability on its consistent fire management performance.

### FIRE-FIGHTING PROCESS

**SP FFFP** application gives massive and effective blanket over fuel surface giving very high thermal stability & hence highest burn back potential. **SP FFFP** forms a vapour-sealing aqueous film on the surface of hydrocarbon fuel so that flammable vapours are fully suppressed with very thick layer of foam blanket. The designed self sealing property re-seals any disturbed or broken surface of burning liquid.

### COMPATIBILITY

**SP FFFP** is proved to be compatible with a wide range of conventional foams including protein based products and hence can be applied as a twin-agent system with other types of foams and dry chemical powders. **SP FFFP** is suitable for use in combination with soft or hard, fresh, brackish or, sea water either as a premixed solution or through foam induction systems.

### APPLICATIONS

- ♦ High risk situations where Class B hydrocarbons such as crude oil, diesel, gasoline and aviation kerosene with low water solubility are stored, processed, or transported (E.g. Refineries & Petrochemicals Plants).
- ♦ Crash Tenders/Rapid Intervention Vehicles (RIV)/Monitors/Portable Foam Extinguishers etc.
- ♦ Stores, ware-houses, tanker loading areas and other local risk involving a spilled fuel fire.
- ♦ Medium expansion fixed branch pipe installation systems for dyke/bundh protection in Tank farms, Power Plants, Steel Plants .
- ♦ Subsurface injection including hose-reel installations, flammable liquid tank fires.
- ♦ Fire suppression systems at Airforce base, Airports, Sea Airports and Navy ships and docks.

### STORAGE

**SP FFFP** has been formulated by world class preservatives such as Acid- Alkaline buffer and other foam stabilizer so as to give a very long storage life. A shelf-life of at least ten years can be expected if it is stored properly in original containers at recommended temperatures and atmospheric condition.

## SPECIFICATIONS

Property	SP FFFP-3%	SP FFFP-6%
Appearance	Brown Colour	Brown Colour
pH@20°C	6.0-8.0	6.0-8.0
Sp gravity@20°C	1.08, min	1.08, min
Miscibility Distilled water Synthetic Sea Water	Miscible Miscible	Miscible Miscible
Surface Tension (dyn/cm)	Less than 18	Less than 18
Spreading Coefficient	More than(+) 0	More than(+) 0
* Lowest use Temperature	0°C	0°C
Viscosity @20°C	Max 20cst	Max 20cst
Sediment	Less than 0.50%(Original) Less than 1.0%(Ageing)	
Freezing and Thawing (Sedimentation fiction) No Sedimentation / Stratification after freezing and Thawing at (-) 5 °C to 60°C	No Sedimentation / Stratification after freezing and Thawing at (-)0°C to 60°C	
** Expansion Ratio	6.00 to 10.00	6.00 to 10.00
** Drainage (25%)	Min 120sec	Min 120sec

\* Also available in freeze protected type

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

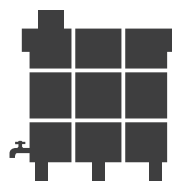
## PACKING



Jerrycan  
20/25/30 Ltr.



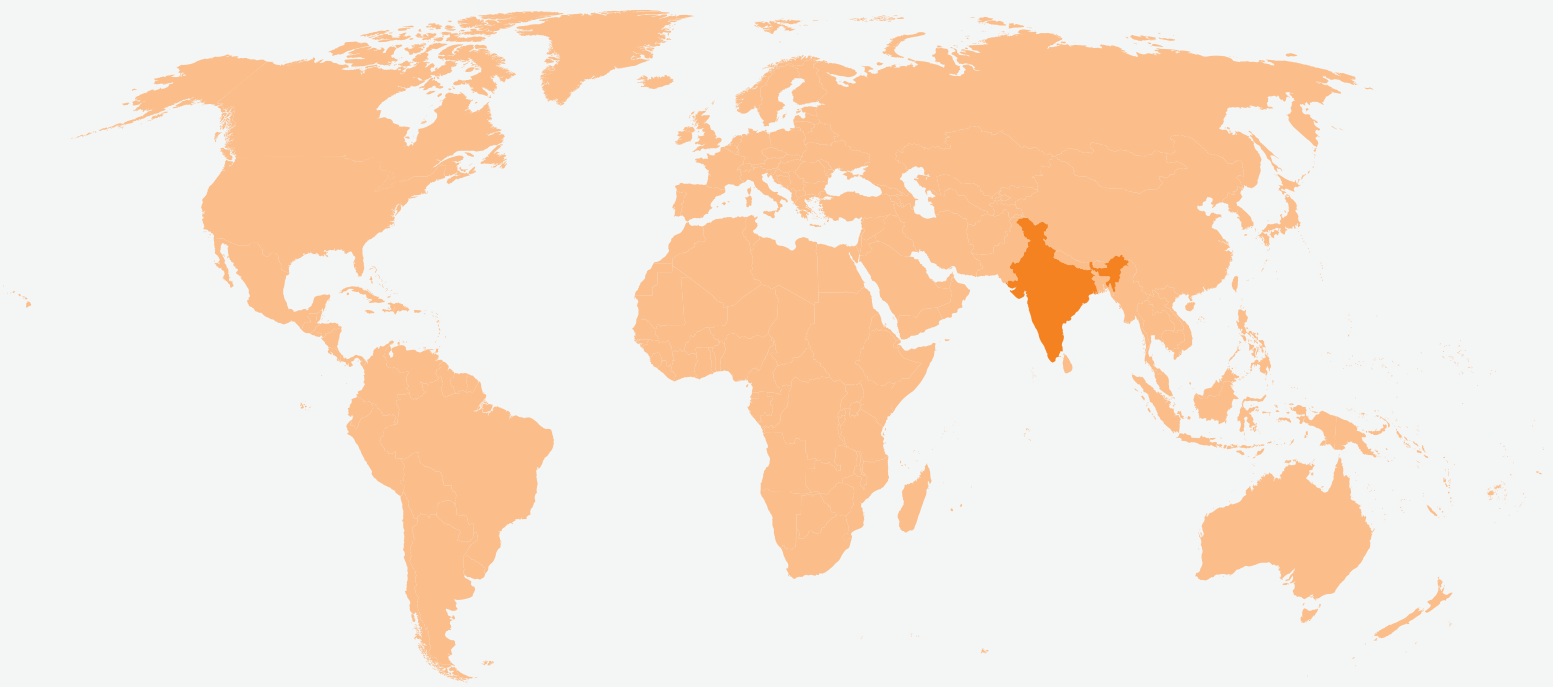
Drum  
200 Ltr.



IBC  
1000 Ltr.

## APPROVALS





**State of the Art  
Technology Formulation**



**National and  
International Certifications**



**Complete in-house  
manufacturing**

**Managed by : VARIA FIRETECH INDUSTRIES**



+91 - 288 - 2570311  
+91 - 288 - 2553121



[info@spsafetyproducts.com](mailto:info@spsafetyproducts.com)



[www.spsafetyproducts.com](http://www.spsafetyproducts.com)

107, Industrial Estate, Opp. Jalaram Mandir, Hapa, Jamnagar - 361120, Gujarat, India.