

## DESCRIPTION

**FLUOROFOAM FFFP3-C6** is a film forming fluoroprotein (FFFP) foam concentrate 3% is used for extinguishing flammable hydrocarbon liquid fires in petroleum industry. It contains hydrolyzed protein and preservatives, together with a blend of fluorinated surfactants to achieve the maximum synergistic effect. The blend of fluorochemicals selected is effective in reducing the surface tension of water as well as the interfacial tension between water and oil sufficiently low to give stable film on the surface of the fuel and as a result produce fire extinguishing rates superior to those obtained with synthetic based compounds. Incorporation of protein in the formulation produces a thick visible blanket which has exceptional burnback resistance.

**FLUOROFOAM FFFP3-C6** should be used as a 3% proportioned solution in fresh or seawater. The correct proportioning or mixture ratio is 3 parts of concentrate and 97 parts of water.

## FEATURES

- Suitable for use with fresh or salt water
- Suitable to use as low and medium expansion foam
- Suitable to extinguish hydrocarbon fires
- Lowest freezing point
- Suitable for use in fixed foam protection systems including sub-surface into hydrocarbon fuels
- Good sealing action on hot metal surface
- Shelf life 10 years
- Suitable for use with plastic, fiberglass or mild steel containers
- Suitable for use with all siliconized dry chemical extinguishing agents
- Recommended for use with air-aspirating foam nozzles

## PROPORTIONING

**FLUOROFOAM FFFP3-C6** is designed for use with the following types of proportioning equipment.

- Fixed or portable in-line educators
- In-line balanced pressure and pump pressure proportioning skid
- Bladder tank proportioning systems
- Handline, air-aspirating nozzles with fixed eductor pickup tube
- Around the pump proportioners

## DISCHARGE DEVICES

**FLUOROFOAM FFFP3-C6** is recommended for use with the following air-aspirating discharge devices.

- Foam chambers
- Standard water fog nozzles for handlines and monitors
- Air-aspirating foam nozzles
- Air-aspirating and non air-aspirating sprinkler heads and spray nozzles

These types of discharge devices will give optimum performance, expansion and drainage times.

## APPLICATIONS

**FLUOROFOAM FFFP3-C6** will provide quality protection for a wide range of hazardous areas such as:

- Airport Crash Fire Rescue
- Aircraft Hanger Fire Protection Systems
- Truck/Rail Loading or Unloading facilities
- Docks/Marine Tankers
- Flammable Liquid Containment Areas

## TYPICAL SPECIFICATION

Product	FFFP
Appearance	Dark Brown clear Liquid
Use Concentration	3%
Specific Gravity @ 20°C	1.12 – 1.14 g/ml
pH @ 20°C	7 ± 0.5
Viscosity @ 20°C	< 30 mm <sup>2</sup> /sec
Suspended sediment (v/v)	< 0.25%
Freezing Point	-5°C
Long term Storage temperature	0°C to 49°C
For short term storage	up to 60°C
*Foam Expansion	> 6:1
*Foam Drainage 25%	> 3:30
Effect of freeze/thaw	Quality not damaged

:- Foam Quality Tests  
 :- Class B Fire Test  
 :- Foam Identification Tests  
 :- Test of Shipping Containers

## ORDERING INFORMATION

**FLUOROFOAM FFFP3-C6** is available in 20 Liters Jerry Can or 200 Liters Drum. Other packing as per customer requirements can also be done.

Part No. FLUOROFOAM FFFP3-J 20L  
 Part No. FLUOROFOAM FFFP3-D 200L

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

## PERFORMANCE

The foaming properties/expansion will vary depending on the type of discharge equipment, inlet pressure and flow rate. The minimum expansion would be at least 7 to 1 and the 25% drainage time would be not less than 2:00.

## ENVIRONMENTAL IMPACT

**FLUOROFOAM FFFP3-C6** is biodegradable, low in toxicity and can be treated in sewage treatment plants.

## STORAGE AND HANDLING

When stored in the drums supplied the material has a long shelf life. The minimum and maximum usable temperatures as per UL for **FLUOROFOAM FFFP3-C6** concentrate are 1.7°C and +49°C respectively and shelf life 10 Years will be found in temperate climates. As with all protein based material, shelf life will be dependent on storage or transportation, thawing will render the product completely usable.

**FLUOROFOAM FFFP3-C6** may be stored in plastic or metal containers. For bulk storage, mild steel tanks may be used provided the internal surface is coated with a protective coating such as bitumen. The use of galvanized material should be avoided for storage vessels and pipework involving the concentrate.

NFDS::FFFP3C6::VER3::MAY 21

NOTE : We reserve the right to modify specification without prior notice.