TENDER SPEC OF AFFF 3% CHEMICAL FOR BANGLADESH NAVY

Ser	Description	Limit
1.	Composition	AFFF 3% is to be compatible to use at 3% proportioned solution (3 part concentrate in 97 parts of water) in fresh or sea water.
2.	Application	AFFF 3% is to be suitable to be used on class B hydrocarbon fuel fires such as oil, diesel and aviation fuels.
3.	Country of Origin & Manufacture	Sweden,UK, Germany, USA, Japan & France.
4.	Performance	The performance should be compatible with International Approvals (Standards such as: a. EN1568, part 3. b. IMO MSC. 1 Circ.1312. c. MED Wheelmarked and d. ICAO Level B).
5.	Foaming	Average expansion >8:1,
6.	Proportioning	AFFF 3% must be suitable to be proportioned at the correct dilution using conventional equipment such as: a. Inline inductors. b. Balanced pressure, Variable flow proportioning systems. c. Bladder tanks around the pump proportioning systems. d. Water turbine driven foam proportioners. e. Self inducting branch pipes and nozzles.
7.	Appearance	Clear yellowish liquid
8.	Specific gravity at 20°C	1.02 +/- 0.05 g/ml
9.	Viscosity at 20°C	≤ 20 Mpa
10.	pH	6.5 – 8.5
11.	Freezing point	<-5°C
12.	Storage temperature	-5 to 60°C
13.	Suspended sediment (v/v)	Less than 0.2%
14.	Surface tension	≤ 18.0 dynes/cm
15.	Environmental impact	AFFF 3% is to be biodegradable. The product should not contain any PFOS or PFOA.
16.	Storage / Shelf life	Shelf life is to be in excess of 10 years in temperate climates.
17.	Packaging	AFFF 3% should be supplied in: a. 25 litres can for all BN Ships (excecep Tug Ships). b. 1000 litre container/ 200 litres drums for Tug Ships.
18.	Certificate of Fire Approval	Certificate of Fire Approval is to be provided as per International Convention for Safety of Life at Sea (SOLAS), 1974.

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