

# Tridol S 1

Tridol S 1 is a superior quality synthetic Aqueous Film-Forming Foam (AFFF) concentrate for extinguishing and securing flammable hydrocarbon liquid fires.

Tridol S 1 is a unique combination of hydrocarbon and fluorochemical surface active agents. It produces a vapour-sealing aqueous film that spreads rapidly over the fuel surface to provide rapid control and extinguishment.

- Film-forming for fast flame knockdown and extinguishment.
- Burnback resistance and post-fire security.
- Foam blanket reseals when ruptured by personnel or equipment.

## APPLICATIONS

Tridol S 1 is used in high risk situations where hydrocarbons (such as crude oil, gasoline, diesel fuel, and aviation kerosene) are stored, processed, or transported. It is used extensively on Rapid Intervention Vehicles (RIV) at major international airports and military bases where fast extinguishment with limited quantities of foam is essential for saving life. Other applications include hydrocarbon storage tanks, process areas, warehouses, road/rail loading racks, power stations, marine terminals, and offshore platforms.

Tridol S 1 provides a vapour-suppressing foam blanket on unignited hydrocarbon spills.

Tridol S 1 can also be used as a wetting agent in combating fires in Class A materials such as wood, paper, and tyres.

## PERFORMANCE

The fire performance of Tridol S 1 is measured primarily against ICAO Level B.

## UL APPROVED

Tridol S 1 is fully approved by Underwriters Laboratories Inc. (UL) in USA.

## EQUIPMENT

Tridol S 1 is intended for use at 1% (1 part concentrate to 99 parts water).

Tridol S 1 is readily proportioned using conventional foam proportioning equipment such as portable and fixed (in-line) foam venturi proportioners, handline nozzles/branchpipes with pick-up tubes, balanced pressure variable flow proportioners, balanced pressure bladder tank proportioners, and around-the-pump proportioners.

Tridol S 1 can be used with air aspirating discharge devices such as low expansion branchpipes, monitors, top pourer sets, rimseal foam pourers, foam/water sprinklers, and base (sub-surface) injection systems.

Tridol S 1 can be used with non-aspirating discharge devices such as spray/fog branchpipes and nozzles, monitors, and spray/fog sprinklers. However, non-aspirated application is not recommended as the primary method of attack for major fires where a stable foam cover is essential.

## COMPATIBILITY

Tridol S 1 is suitable for use in combination with:

- Soft or hard, fresh, brackish or sea water.
- Dry powder extinguishing agents either separately or as twin agent systems.
- Expanded protein-based or synthetic foams for application to a fire in sequence or simultaneously.

## PHYSICO-CHEMICAL PROPERTIES

Appearance		Dark brown liquid
Specific gravity @ 20°C (68°F)		1.025 - 1.045
pH @ 20°C (68°F)		6.5 - 8.0
Viscosity @ 20°C (68°F)	mm <sup>2</sup> sec <sup>-1</sup>	10.0
Viscosity @ 0°C (32°F)	mm <sup>2</sup> sec <sup>-1</sup>	27.0
Viscosity @ -10°C (14°F)	mm <sup>2</sup> sec <sup>-1</sup>	50.0
Maximum continuous storage temperature	°C (°F)	60 (140)
Effect of freeze/thaw		No performance loss
Lowest use temperature	°C (°F)	-18 (0)
Sediment as shipped	% v/v	≤ 0.1
Sediment after ageing	% v/v	≤ 0.5

## FOAM PROPERTIES

As with any foam, the foam properties of Tridol S 1 vary depending on the performance characteristics of foam equipment used and the operating conditions. When tested in accordance with UK Defence Standard 42-40 it gives the following properties:

Expansion Ratio	≥7:1
25% Drainage Time	≥3 minutes 30 seconds

## ENVIRONMENT

Tridol S1 is biodegradable and demonstrates low toxicity to aquatic organisms.

## STORAGE

Tridol S1 is exceptionally stable in long-term storage. A shelf-life of at least ten years can be expected if it is stored properly.

## DISPOSAL

Tridol S1 can be successfully treated in biological waste water treatment systems.

## RELIABILITY

Tridol S1 is produced to rigorous quality control standards to ensure consistent fire performance and excellent product reliability. Angus Fire operates a quality management system which complies with the requirements of BS EN ISO 9001:2000.

## TYPICAL PACKING SPECIFICATION

	Plastic Square		Plastic Cylindrical		Ecobulk MX
Capacity	25 litres	5 US gallons	200 litres	55 US gallons	1000 litres
Empty Weight (kg)	1.2	0.8	9.0		70
Filled Weight (kg)	27	21	217	225	1110
Dimensions (mm)	448 x 286 x 286	402 x 293 x 240	580 D x 922 H		1200 L x 1000 W x 1160 H

## EMERGENCY DELIVERY

For emergency supplies of Tridol S1 phone +44 (0) 15242 61166