

# DuPont™ Capstone™ 1183

## FLUORINATED SURFACTANT

### TECHNICAL INFORMATION

#### Description

DuPont™ Capstone™ 1183 is an amphoteric perfluorinated surfactant that significantly reduces the surface tension of aqueous solutions. It is based on six fluorinated carbon molecules that cannot break down to PFOA in the environment.

#### Features

Capstone™ 1183 enables the formation of an aqueous film that is distributed over the entire surface of the hydrocarbon. It:

- Meets the goals of the voluntary U.S. EPA 2010/15 PFOA Stewardship Program
- Targeted below LOD\* for PFOA

#### Applications

DuPont™ Capstone™ 1183 is a film-forming fluorinated surfactant used in aqueous film-forming foam (AFFF) and alcohol-resistant formulation AFFF-AR (against hydrocarbons and polar liquid fires.) It can eventually be blended with DuPont™ Capstone™ 1157 and 1157N.

#### Physical Characteristics

*Please refer to product specifications data sheet for guaranteed commercial specifications.*

Appearance	Clear amber-colored liquid
Chemical structure	Perfluoroalkyl amine oxide
Active matter, wt%	40
Solvent	Ethanol/water
Density at 20°C (68°F)	1.07
pH	7
Flash point (closed cup)	25°C (77°F)

\*Below the limit of detection (LOD) based on the published analytical method found in *The Journal of Chromatography A*, 1110 (2006) 117–124.

#### General Properties

Solubility at ambient temperature:

Water	Soluble
Ethanol	Soluble

#### Surface Tension at 25°C (77°F) in Aqueous Solution (mN/m)

Capstone™ 1183	0.01%	0.05%	0.1%
Surface tension	19	15.5	15.4

#### Ross-Miles Foaming Data

Concentration of Capstone™ 1183 at 0.5 g/L	mL of Foam After		
	30 sec	3 min	5 min
Deionized water	350	340	340
Artificial sea water	120	120	120

#### Precautions – Toxicity

Like any other chemical product, fluorinated surfactants must be handled and used with care (any contact with the skin and eyes is to be avoided).

A safety data sheet is available on request.



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### Personal Safety, First Aid, Storage, and Handling

See the Material Safety Data Sheet (MSDS) for specific product information. Normal care should be taken to avoid skin and eye contact. Before using this product, please read the current MSDS and the precautionary statement on the product package. Follow all applicable directions.

### Ordering Information

To place an order for DuPont™ Capstone™ 1183, for help in selecting or evaluating these products for your application or for additional literature or a product sample, please contact the local DuPont representative office in your region.

### DuPont Chemical Solutions Enterprise

#### Customer Service Center

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