

Technical Bulletin

DYNAX DX1090 FLUROSURFACTANT

Dynax DX1090 is a non-red-labeled nonionic fluorosurfactant. It can lower the surface tension of aqueous solutions down to 16 dynes/cm at very low concentrations. DX1090 has been especially designed to be used in both synthetic and protein-based, film-forming fire fighting foam agents, such as AFFF (Aqueous Film Forming Foam), AR-AFFF (Alcohol-Resistant Aqueous Film Forming Foam), FFFP (Film Forming Fluoroprotein) and AR-FFFP (Alcohol-Resistant Film Forming Fluoroprotein).

Typical Properties¹

Appearance	Clear to slightly hazy, yellowish liquid
Ionic Character	Non-ionic
Composition	34 - 36% Actives 40-50 % solvents Remainder: water
Density	1.17 g/ml (@ 25°C)
Viscosity	800-1100 cP's (Brookfield DV-E spindle #3, speed 20, temp. 25°C)
Flammability	Non-Flammable
pH	6.0-9.0
Solubility	DX1090 can be diluted directly with water.
Stability	At least one year if stored in original containers at temperatures not exceeding 50°C (122°F)
Storage	DX1090 should be stored at temperatures above 5°C. If frozen or a solid phase separates out of the product, warm the product to room temperature and mix it well before use. Freezing and thawing will not affect the properties of the product or its performance.
Pour Point	-10°C

¹Not for specifications

Surface Tension Data

% Actives in distilled water	Surface Tension (dyne/cm)
0.1	15.4
0.01	20.8
0.001	52.2

By Wilhelmy Plate Method: KRÜSS Force Tensiometer K100C

Product Safety

DX1090 is not derived from PFOS (Perfluorooctyl Sulfonate) or from PFOA (Perfluorooctanoic Acid). DX1090 does not degrade into PFOS or PFOA. DX1090 meets the objectives of the US EPA 2010/15 PFOA Stewardship Program.

DX1090 is not an irritant on skin.

It is a minimal irritant on eyes.

The acute oral LD₅₀ for albino rats is > 5,000 mg/kg.

Precautions and First Aid

DX1090 should be handled with good industrial precautions. Safety goggles and rubber gloves, as well as protective clothing suitable to avoid skin contact should be worn. In case of contact with eyes, flush eyes with plenty of water and consult a physician. In case of skin contact, wash skin with plenty of water and soap.

Important Notice to Purchaser: All statements, technical information and recommendations contained herein are based on information and tests we believe to be reliable. The accuracy or completeness thereof is not guaranteed. Since conditions of use are outside our control, the purchaser should determine the suitability of the product for his intended use and assumes all risk and liability in connection therewith.
