



HEXAFOR™ 644

POLYMERIC FLUOROSURFACTANT

DESCRIPTION

HEXAFOR™ 644 is a polymeric non-ionic fluorosurfactant for water based and solvent based systems.

HEXAFOR™ 644 reduces surface and interface tension, improves wetting and leveling, reduces cratering, fish eyes, and orange peel effect.

HEXAFOR™ 644 is based on short-chain fluorinated monomers containing 6 perfluorinated carbon atoms, that cannot breakdown to PFOA in the environment.

SPECIAL FEATURES

- ❖ Specifically for water-solvent based systems
- ❖ Good reduction of surface tension
- ❖ Excellent leveling
- ❖ High flash point
- ❖ Low foam forming
- ❖ High thermal stability
- ❖ Reduced orange peel effect
- ❖ Improved wetting of most solvent based systems

TECHNICAL INFORMATIONS

APPEARANCE	Viscous liquid
COLOR	Yellow/Amber
IONIC NATURE	Non-ionic
DENSITY	1,23 g/cm ³
FLASH POINT	> 100°C
COMPOSITION	100% active matter

SPECIFICATION

Non volatile content: 98 – 100%

APPLICATIONS

HEXAFOR™ 644 expresses its best properties already at very low concentration (0,05 – 0,3%).

Some examples of application:

- ❖ Paint and coating
- ❖ Floor waxes and polishes
- ❖ Adhesive and caulks
- ❖ Graphic arts
- ❖ Industrial cleaners
- ❖ Electronic

SURFACE TENSION IN DEIONIZED WATER AT 25°C

(Wilhelmy plate method)

- ❖ 21,1 dyn/cm a 0,01 %
- ❖ 20,7 dyn/cm a 0,05 %
- ❖ 20,0 dyn/cm a 0,1 %

INTERFACIAL TENSION AT 25°C

	Cyclohexane
0.5% of active material in water	1,0

FOAM VOLUME A 40°C (in deionized water) [ml]

(Ross-Miles test according to ASTM D 1173)

	Initial	5 min
0.5% of active matter	236	196

PERSONAL SAFETY

HEXAFOR™ 644 does not contain toxic substances. Please, consult the current **Material Safety Data Sheet** for safe use of the product.



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TECHNICAL DATA SHEET



SOLUBILITY

In some cases, to facilitate the solubilization of the product, we recommend to wait a few hours after weighing of the components, and then proceed to stirring the same.

Solvent	% Hexafor 644
Water	>10%
Methyl ethyl ketone	>10%
Isopropanol	>10%
Methanol	>10%
Methoxy propanol	>10%
N-Metil Pirrolidione	>10%
Butyl acetate	>10%
Toluene	10% dispersible
Mineral spirit	Insoluble

STORAGE AND STABILITY

HEXAfor™ 644 is stable for two years if stored in its original drums, sealed and preserved at temperatures of 10 – 45°C (50 – 113°F). If frozen, let it return fluid bringing it to a temperature of about 40°C. Freezing does not change the physical properties of the product

PACKAGING

- ❖ Kg 5 – Drum
- ❖ Kg 25 – Drum
- ❖ Kg 100 – Drum

* Wherever the term "PFOA Free" is used in this TDS, it means content of PFOA is less than limit of detection (20ppb).



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