

# TECHNICAL DATA SHEET



# HEXAFOR™ 644-D

# POLYMERIC FLUOROSURFACTANT

#### **DESCRIPTION**

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

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

**HEXAFOR™** 644-D 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
- Good reduction of interfacial tension.
- Excellent leveling
- High flash point
- High thermal stability
- Reduced orange peel effect
- Improved wetting of most solvent based systems
- Short chain (C6) technology
- Meets the goals of the voluntary U.S. EPA 2010/2015 PFOA Stewardship Program

## SURFACE TENSION IN DEIONIZED WATER AT 25°C

(Wilhelmy plate method)

- ❖ 23.0 dyn/cm a 0.01 %
- ❖ 21.4 dyn/cm a 0.05 %
- ❖ 20.5 dyn/cm a 0.1 %

#### **APPLICATIONS**

**HEXAFOR™ 644-D** expresses its best properties already at very low concentration (0.05 - 0.3% active material).

Some examples of application:

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

#### **TECHNICAL INFORMATION**

APPEARANCE	Viscous liquid	
COLOR	Yellow/Amber	
IONIC NATURE	Non ionic	
DENSITY	1.04 g/cm <sup>3</sup>	
FLASH POINT	74 °C	
COMPOSITION	24-26% active matter 76-74 % DPM	

#### **SPECIFICATION**

Non volatile content: 24 - 26 %

### **SOLUBILITY**

>2% in Water, Isopropanol, Methyl Ethyl Ketone, DPM, Methanol, Butyl Acetate, Methoxy propanol, Toluene.



Guarniflon S.p.A. Maflon Division VAT N. IT 01406020162 REA N. 203233 - Cod.Mecc. BG 003351 Cap. Sociale € 10.000.000 interamente versato





Via T.Tasso 12 - 24060 Castelli Calepio (BG) IT Phone +39.035.4494311 Accounting Dept. Fax +39.035.4425249 | Fluorochemical Specialties http://www.maflon.com - info@maflon.com Technical Dept. Fax +39.035.4494331 February 2015. The Informations contained in this form and any verbal informations are provided to the best of our knowledge. Not assume responsibility for incorrect or outdated informations, except for agreements reached or otherwise for any contractual obligations. These informations are outdated in the face of publishing a new edition.



# TECHNICAL DATA SHEET



## INTERFACIAL TENSION AT 25°C [dyn/cm]

	Heptane	Cyclohexane
0.5% of active material in deionized water	3.1	2.5

# FOAM VOLUME A 40°C (in deionized water)

(Ross-Miles test according to ASTM D 1173)

<u>,                                     </u>		
	Initial	5 min
0.15% of active matter	137	59
0.5% of active matter	334	216

### **PERSONAL SAFETY**

**HEXAFOR™** 644-D does not contain toxic substances. Please, consult the current Material **S**afety **D**ata **S**heet for safe use of the product.

## STORAGE AND STABILITY

**HEXAFOR™ 644-D** is stable for two years if stored in its original drums, sealed and preserved at temperatures of 10 - 45°C (50 - 113°F).

#### **PACKAGING**

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



Guarniflon S.p.A. Maflon Division VAT N. IT 01406020162 REA N. 203233 - Cod.Mecc. BG 003351 Cap. Sociale € 10.000.000 interamente versato







Via T.Tasso 12 - 24060 Castelli Calepio (BG) IT Phone +39.035.4494311 Accounting Dept. Fax +39.035.4425249 | Fluorochemical Specialties http://www.maflon.com - info@maflon.com Technical Dept. Fax +39.035.4494331

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