# HUNTSMA Enriching lives through innovation

# **Technical Bulletin**

# SURFONIC<sup>®</sup> JL-80X Surfactant

### **PRODUCT DESCRIPTION**

SURFONIC<sup>®</sup> JL-80X surfactant, an alkoxylated linear alcohol, is a fluid, water-soluble, biodegradable, nonionic surface-active agent. It provides good detergency and wetting properties as well as low freeze and pour points. This product is non-gelling in water at 25°C and higher temperatures. SURFONIC® JL-80X surfactant is compatible with other nonionic surfactants and with most anionic and cationic surfactants.

APPLICATIONS	<ul> <li>industrial cleaning compounds</li> </ul>	• pa

- household detergents
- dust control compositions

• wetting agents for clays used in manufacture of bricks and ceramics

- aint brush cleaner
- concrete additive
- textile and paper manufacture
- wallpaper removal

Ρ A SALES SPECIFICATIONS 10----

Property	Specifications	<u>Test Method</u> *
Appearance, 25°C	Clear and substantially free of suspended matter	ST-30.1
Cloud point, °C, 1% aqueous	57 - 62	ST-9.1, 5.2.1
Color, Pt-Co, 25°C	100 max.	ST-30.12
oH, 1% solution	6.5 - 7.5	ST-31.36,C
Water, wt%	0.5 max.	ST-31.53

\*Methods of Test are available from Huntsman Corporation upon request.

## **TYPICAL PROPERTIES**

Regu	latory	Infoi	rmat	<u>tion</u>

DOT/TDG Classification	Not Regulated
HMIS Code	2-1-0
CAS Number	68154-97-2
TSCA Inventory	Yes
WHMIS Classification	D2B
Canadian DSL	Yes
Physical Properties	
Flash point, COC, °F/°C	375/190
Pour point, °F/°C	23/-5
Density, g/ml at 25°C (77°F	<sup>-</sup> ) 1.0037
Weight, lbs/US gal at 25°C	(77°F) 8.35
Viscosity, kinematic	
cSt at 15.6°C (60°F)	80
cSt at 25°C (77°F)	51

### **Performance Properties**

Draves Wetting Time	, sec at 25°C	
1.5 gram hook,	0.25% solution	<1.0
-	0.10% solution	9.8
3.0 gram hook,	0.10% solution	4.8
	0.05% solution	17.8
Foam height, Ross-M	liles, mm	
120°F, 0.1% solution, initial		75
after 5 minutes		70
Surface tension, dyne	es/cm,	
25°C, 0.1% solut	ion	29.2
Chemical Properties	S	
Hydroxyl Number (the	eoretical)	97
HLB Value	13.1	

HUNTSMAN

Enriching lives through innovation

#### **TOXICITY AND SAFETY**

For information on the toxicity and safe handling of this product, please read the Material Safety Data Sheet prior to use of the product.

#### HANDLING AND STORAGE

SURFONIC<sup>®</sup> JL-80X surfactant may be satisfactorily stored in carbon steel tanks using steel pipes and pumps. Caution must be exercised, however, to keep the material in the anhydrous state to prevent severe corrosion to the carbon steel tank and related equipment. A drier on the breathing nozzle is recommended to help maintain anhydrous conditions in the storage tank.

For longer term color stability, it is recommended that the product be stored under an inert atmosphere. Solid sediment may form upon standing. There should be circulation in the storage vessel to keep solids suspended.

Low pressure steam coils in storage tanks and steam tracing of transfer lines should be provided in cases where low environmental temperatures may make pumping of the product difficult.

#### SHIPPING DATA

Product is available in tank cars, tank trucks and drums of 450 pounds (204 kilograms) net weight. Small samples are available by contacting our sample department at 1-800-662-0924.

#### **BIODEGRADABILITY AND ENVIRONMENTAL SAFETY**

Semi-continuous activated sludge studies performed on SURFONIC JL-80X surfactant indicate this material is completely biodegraded, as measured by disappearance of dissolved organic carbon.

Two standard aquatic toxicity tests on SURFONIC JL-80X surfactant show it to have properties typical of alcohol ethoxylates:

Species	<u>LC<sub>50</sub>, ppm</u>
Bluegill sunfish	2.3
Water flea	2.6

#### **General References**

- 1. Journal of the American Oil Chemists' Society, Volume 65, No. 10, p. 1669 (1988).
- 2. Talmage, S. S., <u>Environmental and Human Safety of Major Surfactants:</u> <u>Alcohol Ethoxylates and</u> <u>Alkylphenol Ethoxylates</u>, a report to the Soap and Detergent Association, Lewis Publishers, 1994.

3056-1107

Huntsman Corporation Business Offices 10003 Woodloch Forest Dr. The Woodlands, TX 77380 (281) 719-6000

Huntsman Advanced Technology Center Technical Service 8600 Gosling Rd. The Woodlands, TX 77381 (281) 719-7780

Samples 1-800-662-0924

www.huntsman.com

Copyright © 2007 Huntsman Corporation or an affiliate thereof. All rights reserved. SURFONIC<sup>®</sup> is a registered trademark of Huntsman Corporation or an affiliate thereof in one or more, but not all countries.

Huntsman Petrochemical Corporation warrants only that its products meet the specifications stated in the sales contract. Typical properties, where stated, are to be considered as representative of current production and should not be treated as specifications. While all the information presented in this document is believed to be reliable and to represent the best available data on these products, NO GUARANTEE, WARRANTY, OR REPRESENTATION IS MADE, INTENDED, OR IMPLIED AS TO THE CORRECTNESS OR SUFFICIENCY OF ANY INFORMATION, OR AS TO THE MERCHANTABILITY OR SUITABILITY OR FITNESS OF ANY CHEMICAL COMPOUNDS FOR ANY PARTICULAR USE OR PURPOSE, OR THAT ANY CHEMICAL COMPOUNDS OR USE THEREOF ARE NOT SUBJECT TO A CLAIM BY A THIRD PARTY FOR INFRINGEMENT OF ANY PATENT OR OTHER INTELLECTUAL PROPERTY RIGHT. EACH USER SHOULD CONDUCT A SUFFICIENT INVESTIGATION TO ESTABLISH THE SUITABILITY OF ANY PRODUCT FOR ITS INTENDED USE. Liability of Huntsman Petrochemical Corporation and its affiliates for all claims is limited to the purchase price of the material. Products may be toxic and require special precautions in handling. For all products listed, user should obtain detailed information on toxicity, together with proper shipping, handling and storage procedures, and comply with all applicable safety and environmental standards.