

### **ECOSURF™ LF-45 Surfactant**

Nonionic, Non-APEO Surfactant

## Regional Product Availability

Asia-Pacific

#### **Description**

ECOSURF™ LF-45 Surfactant is a nonionic, secondary alcohol alkoxylate surfactant suitable for many paints and coatings applications.

#### **Key Features**

- Excellent wetting
- Excellent foam control
- Excellent caustic stability
- Non-APEO surfactant
- Excellent formulation and handling properties

#### **Benefits**

- Readily biodegradable (>60% within 28 days per OECD 301)
- Low aquatic toxicity (EC50 > 10mg/L)

### **Typical Properties**

(These properties are typical but do not constitute specifications)

Property	Typical Values
Appearance (at 25 °C)	Clear, colorless to yellow liquid
Cloud point (°C) (1)	46
HLB <sup>(2)</sup>	12 - 13
Density at 40 °C (g/ml)	1.002
Viscosity at 40 °C (cSt)	49.8
pH (1% aq. solution)	7.0
Polydispersity	1.07
CMC (3) / Surface tension (4)	28 / 32
Foam Height (5)	120 / 10
Pour point (°C)	6
Flash point, closed cup, ASTM D93 (°C)	193

<sup>(1)</sup>Cloud Point, 1% aqueous solution

# Solubilty and Compatibility

- Dispersible in water
- Soluble in chlorinated solvents and most polar organic solvents
- Chemically stable in the presence of dilute acids, bases and salts
- Compatible with anionic, cationic and other nonionic surfactants

<sup>(2)</sup>HLB Range: < 10 w/o emulsifier, > 10 o/w emulsifier

<sup>(3)</sup>Critical micelle concentration: ppm at 25 °C

<sup>(4)</sup>Surface tension: dynes/cm at 0.2% actives, 25 °C

<sup>(5)</sup>Ross-Miles foam height: mm at 0.1 wt% actives

# Handling Precautions

Before using this product, consult the Material Safety Data Sheet (MSDS)/Safety Data Sheet (SDS) for details on product hazards, recommended handling precautions and product storage.

#### **Storage**

Store products in tightly closed original containers at temperatures recommended on the product label.

# Disposal Considerations

Dispose in accordance with all local, state (provincial) and federal regulations. Empty containers may contain hazardous residues. This material and its container must be disposed in a safe and legal manner.

It is the user's responsibility to verify that treatment and disposal procedures comply with local, state (provincial) and federal regulations. Contact your Dow Coating Materials Technical Representative for more information.

# Chemical Registration

Many countries within the Asia-Pacific require the registration of chemicals, either imported or produced locally, prior to their commercial use. Violation of these regulations may lead to substantial penalties imposed upon the user, the importer or manufacturer, and/or cessation of supply. It is in your interests to ensure that all chemicals used by you are registered. Dow does not supply unregistered products unless permitted under limited sampling procedures as a precursor to registration.

### Note on Asia-Pacific Product Line

Product availability and grades vary throughout the countries in Asia-Pacific. Please contact your local Dow Coating Materials representative for further information and samples.

## Product Stewardship

Dow has a fundamental concern for all who make, distribute, and use its products, and for the environment in which we live. This concern is the basis for our product stewardship philosophy by which we assess the safety, health, and environmental information on our products and then take appropriate steps to protect employee and public health and our environment. The success of our product stewardship program rests with each and every individual involved with Dow products - from the initial concept and research, to manufacture, use, sale, disposal, and recycle of each product.

#### **Customer Notice**

Dow strongly encourages its customers to review both their manufacturing processes and their applications of Dow products from the standpoint of human health and environmental quality to ensure that Dow products are not used in ways for which they are not intended or tested. Dow personnel are available to answer your questions and to provide reasonable technical support. Dow product literature, including safety data sheets, should be consulted prior to use of Dow products. Current safety data sheets are available from Dow.

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