

Product Name

TOXIMUL® 3473F, 3474F, 3476F, and 3479F

Chemical Description

TOXIMUL 3470F series surfactants are blends of linear calcium sulfonate and non-alkylphenol nonionic surfactants.

Applications

TOXIMUL 3470F series surfactants are general agricultural emulsifiers. They are used in combination with each other, generally in pairs, in an extensive range of pesticide formulations.

Typical Properties

	<u>TOXIMUL 3473F</u>	<u>TOXIMUL 3474F</u>
Appearance at 25°C.....	Dark Amber Liquid	Dark Amber Liquid
Density, g/ml (lbs/U.S. gal) at 25°C.....	1.02 (8.5)	1.03 (8.6)
Moisture, %.....	1.0 max	1.0 max
pH, 5% in 1:1 IPA/H ₂ O	5.7	5.4
Viscosity, cps, at 25°C.....	325	6160
Flash Point, SETA, °C (°F).....	69.4 (157)	63.9 (147)
Pour Point, °C (°F).....	8 (46)	-23 (<10)
HLB.....	10	6
RVOC, U.S. EPA, %.....	25	28
Solubility: Water	Dispersible	Dispersible
Methanol	Soluble	Dispersible
Kerosene.....	Insoluble	Soluble
Xylene	Soluble	Soluble
	<u>TOXIMUL 3476F</u>	<u>TOXIMUL 3479F</u>
Appearance at 25°C.....	Dark Amber Liquid	Dark Amber Liquid
Density, g/ml (lbs/U.S. gal) at 25°C.....	1.04 (8.7)	1.01 (8.5)
Moisture, %.....	1.0 max	1.0 max
pH, 5% in 1:1 IPA/H ₂ O	5.4	5.8
Viscosity, cps, at 25°C.....	3990	630
Flash Point, SETA °C (°F).....	69.4 (157)	67.8 (154)
Pour Point, °C (°F).....	-23 (10)	9 (48)
HLB.....	8	13
RVOC, U.S. EPA, %.....	24	25
Solubility: Water	Dispersible	Dispersible
Methanol	Dispersible	Soluble
Kerosene.....	Insoluble	Insoluble
Xylene	Soluble	Soluble

Other Data

U.S. DOT Classification.....Combustible Combustible

Storage & Handling

Normal safety precautions (i.e. gloves and safety goggles) should be employed when handling TOXIMUL 3470 series. Contact with the eyes and prolonged contact with the skin should be avoided. Wash thoroughly after handling material. Use in a well ventilated area away from sparks and open flame.

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Storage & Handling

Bulk Storage Information: TOXIMUL 3473F, 3474F, 3476F, and 3479F stored in drums at temperatures below 55°F (13°C) may thicken or solidify. They may be fluidized by warming with a drum heater or in a steam room. Drums should be vented prior to heating to avoid excessive pressure build up. Product storage temperatures over 100°F (38°C) are not recommended as excessive solvent loss may occur. The flash point may be exceeded when warming to pump but the temperature should be below the flash point for storage.

Standard Packaging: TOXIMUL 3473F, 3474F, 3476F and 3479F are available in drums (450 lb, 205 kg) and in bulk quantities.

Clearances

All components of TOXIMUL 3470F series surfactants are approved for use in the following countries: United States (TSCA), Europe (EINECS/Polymer Exempt), Canada (DSL), Australia (AICS), Philippines (PICCS), China (IECSC), New Zealand (NZIoC), and Korea (ECL).

The TOXIMUL 3470F series are approved for use as inert ingredients under U.S. EPA 40 CFR 180.910 and 180.960, pre- and post-harvest applications.

Additional Safety Information

A Material Safety Data Sheet is available upon request.

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Stepan

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