## Stepan



## **Product Bulletin**

## **AGRICULTURE**

Product Name

Chemical Description

CAS Registry No.

Applications

Typical Properties

Other Data

Typical Properties

Other Data

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## TOXIMUL® TA-2, TA-5, TA-8, and TA-15

The TOXIMUL TA series surfactants are ethoxylated tallow amines.

61791-26-2

TOXIMUL TA surfactants are ethoxylated tallow amines with approximately two to fifteen moles of ethylene oxide. They were developed for use as emulsifiers for a variety of pesticide formulations. They can be used alone or in combination with other surfactants.

		TOXIMUL TA-2	TOXIMUL TA-5
Appearance	at 25°C V	'iscous Amber Liquid*	Amber Liquid
Density, g/ml (lbs/U.S. gal) at 25°C		0.89 (7.4)*	0.95 (7.9)
Moisture, %		0.1	0.1
pH, 5% in 1:1 IPA/H <sub>2</sub> O		9.8	10
Viscosity at 25°C, cps			230
Flash Point, SETA, °C (°F)			>94 (>201)
	°C (°F)		15 (59)
	)		121
Tertiary Ami	ne, %	96 min.	96 min.
App. Moles, EO		2	5
HLB, calcula	ted	5	9
RVOC, U.S. EPA, %		0	0
Solubility	Water	Insoluble	Soluble
	Methanol	Soluble	Soluble
	Kerosene	Soluble	Soluble
	Xylene	Soluble	Soluble

OT Classification ....... Corrosive Corrosive

	TOXIMUL TA-8	TOXIMUL TA-15
Appearance at 25°C Amber Li		Amber Liquid
Density, g/ml (lbs/U.S. gal) at 25°C 0.98 (8.		1.02 (8.5)
Moisture, % 0		0.1
pH, 5% in 1:1 IPA/H <sub>2</sub> O	9.5	9.7
Viscosity at 25°C, cps		180
Flash Point, SETA, °C (°F)		>94 (>201)
Pour Point, °C (°F)		-2 (28)
Amine Value		62
Tertiary Amine, %		96 min.
App. Moles, EO	8	15
HLB, calculated		14
RVOC, U.S. EPA, % 0		0
Solubility Water	Soluble	Soluble
Methanol	Soluble	Soluble
Kerosene	Soluble	Insoluble
Xylene	Soluble	Soluble

DOT Classification ...... Corrosive Non-Hazardous

\*at 38°C

TOXIMUL® is a registered trademark of Stepan Company.



Environmental Effects

Health Effects

Storage & Handling

Workplace Exposure

Clearances

Additional Safety Information

Product Stewardship

The products are expected to be inherently biodegradable. Additional information is available upon request.

The products are expected to be slightly toxic orally (LD50 > 1000 mg/kg) and may be corrosive to skin and eyes.

Normal safety precautions (i.e gloves and safety goggles) should be employed when handling TOXIMUL TA surfactants. Contact with the eyes and prolonged contact with the skin should be avoided. Wash thoroughly after handling materials.

Bulk Storage Information: Stainless steel and glass fiber-reinforced polyester tanks are recommended. Many oven-cured phenolic and epoxy/phenolic linings may also be used. Elevated storage temperature may be desirable to maintain ease of pumping. Temperatures up to 130°F (54°C) can be maintained for long periods of time without degradation of the product.

TOXIMUL TA surfactants which have been stored in drums at temperatures below 60°F (16°C) may thicken or solidify. TOXIMUL TA-2 is a viscous liquid below 75°F (24°C). The surfactants 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 temperatures over 130°F (54°C) are not recommended.

Standard Packaging: TOXIMUL TA-2 is available in drums (400 lb, 181 kg) and in bulk quantities. TOXIMUL TA-5 and TA-8 are available in drums (425 lb, 193 kg) and in bulk quantities. TOXIMUL TA-15 is available in drums (450 lb, 205 kg) and in bulk quantities.

Occupational exposure can occur primarily through skin contact or via inhalation of vapors and mists. Engineering controls, personal protective equipment, and other workplace practices should be used to control these exposures.

TOXIMUL TA series surfactants are approved for use as inert ingredients under U.S. EPA 40 CFR 180.920.

A Material Safety Data Sheet is available upon request.

This product bulletin has been written in accordance with ACC's Product Stewardship guidelines.

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Corporate Headquarters
Northfield, Illinois 60093, U.S.A.
847-446-7500 847-501-2100 fa
Website: www.stepan.com

quarters
is 60093, U.S.A.
847-501-2100 fax
tepan.com

For Technical Service Call: Northfield, IL USA 800-745-7837
Longford Mills, Canada 705-326-7329 • Mexico City, Mexico +52-555-533-1697
Voreppe, France +33-476-505-100 • Bogota, Colombia +57-1-6362808
Stalybridge, United Kingdom +44-141-338-9083
Manila, Philippines +632-891-1708

Responsible Care