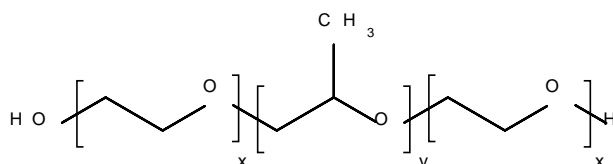


Product Bulletin

Product Name

MAKON® L61

Chemical Structure



Chemical Description

Polyalkylene Glycol

CAS Registry Number

9003-11-6

INCI Name

Poloxamer 181

Applications

MAKON L61 is a nonionic EO/PO block copolymer that exhibits low foaming, defoaming, and good water-in-oil emulsification properties. MAKON L61 can be used in a variety of markets including Household, Industrial, Institutional, Agriculture, Paints and Coatings, Metalworking, and Textiles. Applications for best fit are defoaming, metal cleaning, spray wash, warewash, general purpose cleaning, textile wetting and scouring, agricultural adjuvants, and non-foaming emulsions. MAKON L61 is a low ash product. MAKON L61U is available as an unfiltered product, but properties may vary from MAKON L61.

Typical Properties

Appearance at 25 °C	Clear to Slightly Hazy Liquid
pH, 1% in 50:50 IPA:Water	5-8
Actives, %	100
Water, %	0.4 max
Color, APHA	50 max
HLB	3
Average Molecular Weight, g/mol	2000
Hydroxyl Value, mg KOH/g	56
Cloud Point, 10% Aqueous °C (°F)	17 (63)
Cloud Point, 1% Aqueous °C (°F)	24 (75)
Pour Point, °C (°F)	-32 (-26)
Flash Point, °C (°F)	> 94 (> 201)
Viscosity at 25 °C (77 °F) / 38 °C (100 °F), cps	276 / 132
Density at 25 °C (77 °F), g/mL (lb/U.S. gal)	1.01 (8.46)
Density at 38 °C (100 °F), g/mL (lb/U.S. gal)	1.00 (8.38)
Surface Tension, 0.1% Aqueous, dynes/cm	Insoluble
Interfacial Tension with Light Mineral Oil, 0.1% Aqueous, dynes/cm	Insoluble
Draves Wetting at 50 °C (122 °F), 1.0% / 0.1% Aqueous, sec	63 / 16
Foam Height, Ross-Miles at 25 °C (77 °F), 0.1% Aqueous, Initial / 5 min, mm	Insoluble / Insoluble
Foam Height, Ross-Miles at 50 °C (122 °F), 0.1% Aqueous, Initial / 5 min, mm	0 / 0
Foam Height, Blender at 25 °C (77 °F), 0.1% Aqueous, Initial / 5 min, mm	12 / 4
Solubility in Water at 25 °C (77 °F)	Insoluble
RVOC, U.S. EPA, %	0
Preservative	None required



Environmental Effects

Publically available data shows this type of chemistry to be inherently biodegradable.

Storage & Handling

Standard Packaging: MAKON L61 is available in drums, totes, and bulk quantities.

Non-Bulk Storage Recommendations: MAKON L61 should be stored in closed containers and kept in a cool, dry place away from incompatible materials (see Section 10 of the SDS). If material is frozen, it 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.

Bulk Storage Recommendations: MAKON L61 should be stored in vessels of 316 stainless steel, but carbon steel is adequate assuming effective moisture exclusion. Elevated storage temperature may be desirable to maintain ease of pumping.

Product temperatures over 122 °F (50 °C) are not recommended.

Normal safety precautions (i.e., gloves and safety goggles) should be employed when handling MAKON L61. Contact with eyes, nose or prolonged contact with skin should be avoided. Wash thoroughly after handling MAKON L61.

Workplace Exposure

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

Clearances

All components of MAKON L61 are listed in the following countries; the registration numbers for the active ingredients are included in parentheses: Australia (AICS 9003-11-6), Canada (DSL 9003-11-6), China (IECSC 9003-11-6), Japan (ENCS (7)-1246), Korea (ECL Serial No. KE-24574), New Zealand (NZIoC 9003-11-6), Philippines (PICCS 9003-11-6), Taiwan (TCSI 9003-11-6), and United States (TSCA 9003-11-6).

It is the responsibility of the formulator to review the chemical control regulations for each country where the end product is intended to be sold or used.

Product Stewardship

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

Additional Safety Information

A Safety Data Sheet is available upon request.



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