

Product Bulletin

Product Name

MERPOL® A

Chemical Description

Alcohol phosphate

Applications

Functional Properties

- Surface tension reduction
- Low foaming
- Wetting agent/emulsifier
- Ink and print paste wetting agent, viscosity modifier
- Anti-foaming agent for paper processing
- Leveling agent and anti-foamer in coatings

End Product Uses

- Chemical Manufacture
- Metal Processing
- Petroleum
- Plastics and Printing Ink Manufacture
- Textiles & Synthetic Fibers
- Cosmetics
- Paper
- Soap and Chemical Specialties

Typical Properties

Appearance at 25 °C.....	Water-white clear liquid
Density at 25 °C, g/ml (lbs/U.S. gal).....	1.07 (8.9)
Actives, %	100
Flash Point (TAG), °C (°F)	138 (280)
Boiling Point at 760 mm Hg , °C (°F).....	200 (393)
pH, 1% in Deionized Water at 25 °C	5 - 7
Critical Micelle Concentration, %.....	0.005
HLB.....	6.7
Cloud Point, 1%, °C (°F)	<25 (<77)
Draves Wetting, % product required for 25 sec.	
at 25 °C (77°F).....	0.13
at 71 °C (160°F).....	0.06
Ross-Miles Foam Height, mm, 0.1% aqueous, at 40 °C (105 °F)	
Soft Water Initial.....	40
Soft Water 10 min.	40
Hard Water Initial	15
Hard Water 10 min.....	5
Surface Tension, dynes/cm	
0.10% aqueous at 25 °C.....	26
Solubility at 25 °C (77 °F): see next page	
Stability at 25 °C (77 °F):	
Acids	Stable
Bases.....	Stable
Heat, °C (°F)	Stable to 100 (212)
Freezing.....	Stable



Solubility in Various Solvents (% MERPOL A in solvent)

Solvent	5.0%	1.0%	0.1%
Water	Turbid, Separates	Turbid, Separates	Turbid, Stable
10% Sodium Hydroxide	Turbid, Separates	Turbid, Separates	Turbid, Stable
10% Sulfuric	Turbid, Separates	Turbid, Separates	Turbid, Stable
Ethanol	Clear Solution	Clear Solution	Clear Solution
Isopropanol	Clear Solution	Clear Solution	Clear Solution
Ethylene Glycol	Turbid, Stable	Turbid, Stable	Turbid, Stable
Butyl Cellosolve	Clear Solution	Clear Solution	Clear Solution
Acetone	Clear Solution	Clear Solution	Clear Solution
Kerosene	Turbid, Separates	Turbid, Separates	Clear Solution
Stoddard Solvent	Turbid, Separates	Turbid, Stable	Clear Solution
Mineral Oil	Turbid, Separates	Turbid, Stable	Clear Solution
Benzene	Clear Solution	Clear Solution	Clear Solution
Carbon Tetrachloride	Clear Solution	Clear Solution	Clear Solution
Butyl Stearate	Turbid, Separates	Turbid, Stable	Clear Solution

Toxicity MERPOL A is practically non-toxic orally (Oral LD₅₀ = 7500 mg/kg in rats) and causes severe skin and mild eye irritation.

Storage & Handling Normal safety precautions (i.e., gloves and safety goggles) should be employed when handling MERPOL A. Contact with eyes and skin should be avoided. MERPOL A should be stored in a cool, dry place in closed containers.

Standard Packaging: MERPOL A is available in bulk and 55 gallon drums.

Clearances All components of MERPOL A are listed in the following countries: United States (TSCA listed), Europe (EINECS listed), Canada (DSL listed), China (ENCSC listed), and Australia (AICS listed). Product composition is considered a trade secret.

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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