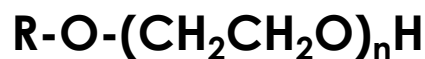


PRODUCT INFORMATION SHEET

AE-2/AE-2A, Alcohol Ethoxylate

DESCRIPTION



n = average number of moles of ethoxylate

CAS Number: 68002-97-1

PHYSICAL PROPERTIES:

(All properties @ 760mmHg unless stated)

Specific Gravity: 0.9 at 20°C (68°F)
 Vapor Pressure: <0.01 mmHg at 20°C (68°F)
 Melting Point: 7°C (45°F)
 Viscosity: 21cp at 20°C (68°F)
 Boiling Point: 250°C (482°F)

Produced by reacting vegetable oil-derived midcut alcohol (C12-14) with Ethylene Oxide; 'R' in the structural diagram above represents a saturated alkyl chain of carbon atoms equal to 12 or 14 and 'n' refers to the average number of mols of Ethylene Oxide per mol of midcut alcohol. It is a clear to slightly hazy liquid under ambient conditions.

PRODUCT NOTES

Insoluble in water under ambient conditions. Material is hygroscopic and will pick up moisture from the air.

GENERAL INFORMATION

APPLICATION USES

Material is a non-ionic surfactant. Potential intermediate and end use applications include hand dish liquids, shampoos, soaps, shower gels, foaming control agents, textile applications and specialty surfactants.

OIL DERIVATION/ALLERGEN/BSE/MICROBIAL

- All of our brands are produced in P&G Chemicals' global network. They are manufactured from naturally occurring vegetable oils.
- Bovine Spongiform Encephalopathy (BSE) and Transmissible Spongiform Encephalopathy (TSE) are not a concern.
- No gluten/wheat, corn, dairy, egg, fish/shellfish, sulfites, yeast, starch, MSG, peanut, other nut, rice, potential allergens are present. No preservatives or additives are present
- At the low vacuum and high temperature at which our process operates, our products are not micro-susceptible.

RETEST DATE

Stability is affected by how a product is stored. We expect the product to be stable if it is kept under the recommended Storage and Handling conditions. We recommend retesting the product for Sensitive Properties every 9 months.

(Information listed in Storage and Handling section)

P&G CHEMICALS DOES NOT PROVIDE SHELF LIVES OR EXPIRY DATES.

STORAGE AND HANDLING (recommended)

Storage Temp Targets:	Target: 20 °C (68°F)	Handling Temp Min-Max:	Max: 49°C (120°F)
Max Steam, psi:	30	Agitation/Recirculation:	Yes, if heating medium > 100°C
Load out filter (reco):	5 micron	Nitrogen Blanket	Yes
Sensitive Properties:	Moisture, Color, Carbonyl	(<1% O ₂)	
Railcar or Tank Truck:	Carbon Steel or Phenolic Epoxy Lined		
Storage Tank:	Carbon Steel or Phenolic Epoxy Lined		
Pumps and Lines:	Carbon Steel		

For further details, or samples of this material or other P&G Chemicals products, visit our website:

www.pgchemicals.com

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