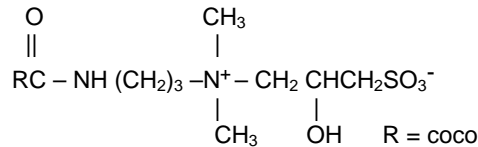


Product Bulletin

Product Name

AMPHOSOL[®] CS-50

Chemical Structure



Chemical Description

AMPHOSOL CS-50 is derived from tertiary amine reacted with chlorohydroxypropane sulfonic acid.

CAS Registry No.

68139-30-0

INCI Name

Cocamidopropyl Hydroxysultaine

Applications

Functional Properties

- Secondary surfactant
- Foam booster
- Viscosity builder
- Compatible with anionics, nonionics and cationics

End Product Uses

PERSONAL CARE

- Bubble Baths
- Body Washes
- Shampoos
- Baby Products
- Hand Soaps
- Facial Washes
- Shower Gels
- Ethnic Products

HOUSEHOLD

- All Purpose Heavy Duty Industrial Cleaner
- Metal Cleaner
- Paint Stripper

Typical Properties

Appearance at 25°C.....	Clear viscous liquid	Density, g/ml (lbs/U.S. gal).....	1.112 (9.25)
Solids, %.....	50.0	Sodium Chloride, %.....	6.3
pH, 10% aq.	8.5	Color, Gardner	2.0
RVOC, U.S. EPA, %	0	Viscosity, cps at 25°C.....	150
Preservative	Not required		

Biodegradability

Product is biodegradable. Additional information is available upon request.

Toxicity

AMPHOSOL CS-50 is non-irritating to the eyes at concentration of 5% active (Draize OECD 405), and non-irritating to the skin at concentration of 10% active (Draize OECD 404).

Storage & Handling

Normal safety precautions (i.e. gloves and safety goggles) should be employed when handling AMPHOSOL CS-50 in its concentrated form. Contact with the eyes and prolonged contact with the skin should be avoided. Wash thoroughly after handling material.

It is recommended that AMPHOSOL CS-50 be stored in sealed containers and kept at temperatures between 50°F (10°C) and 120°F (49°C). Avoid overheating or freezing. If material is frozen, mild heat and agitation are recommended to ensure the material is homogeneous before use.

Standard Packaging: AMPHOSOL CS-50 is available in bulk and 55 gallon drums (net weight 450 lb/204 kg).

Clearances

All components of AMPHOSOL CS-50 are listed in the following countries, the registration number for the active ingredients is included in parentheses: Europe (EINECS 268-761-3), United States (TSCA 68139-30-0), Australia (AICS 68139-30-0), Philippines (PICCS 68139-30-0), Canada (DSL 68139-30-0) and china (EICS 2003).

AMPHOSOL[®], BIO-TERGE[®], and STEPAN[®] are registered trademarks of Stepan Company.



Formulation

Body Wash (Formulation #872)
This product cleans and conditions skin.

<u>Ingredients</u>	<u>Wt, % (as is)</u>	<u>Function</u>
D.I. Water	q.s. to 100.0	Solvent carrier
HALLSTAR PEG 6000 DS	1.5	Thickener
BIO-TERGE® AS-40	25.0	Primary Surfactant
AMPHOSOL CS-50	6.0	Secondary Surfactant
Glycerin (Uniqema)	1.0	Humectant
DL-Panthenol (Roche)	0.05	Additive
Preservative, Dye, Fragrance	q.s.	Additives
Citric Acid, 50%	q.s.	pH adjuster
Sodium Hydroxide, 50%	q.s.	pH adjuster
Sodium Chloride	q.s.	Viscosity Adjuster

Mixing Procedures:

Into a suitable vessel equipped with mixing and heating capabilities, combine the following ingredients: D.I. Water, HALLSTAR PEG 6000 DS, BIO-TERGE AS-40, AMPHOSOL CS-50, Glycerin and DL-Panthenol. Heat to 60-65°C. Mix until solution is clear. Cool the batch to 25°C. Add Preservative, Dye and Fragrance. Adjust pH with Citric Acid or Sodium Hydroxide and viscosity with Sodium Chloride, if necessary.

Physical Properties:

Appearance at 25°C.....	Clear liquid
pH at 25°C	6.0 - 6.5
Viscosity, cps at 25°C	3,000 - 3,500

Storage Stability

1 month at 25°C	Stable
1 month at 42°C	Stable
1 month at 50°C	Stable

Additional
Safety
Information

A Material Safety Data Sheet is available upon request.

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