

Product Bulletin

Product Name	STEOL® CS-270 PLUS
Chemical Structure	$\text{CH}_3(\text{CH}_2)_n\text{CH}_2(\text{OCH}_2\text{CH}_2)_2\text{OSO}_3\text{Na}$ $n = 8-14$
Chemical Description	Sodium Laureth Sulfate
CAS Registry Number	68585-34-2
INCI Name	Sodium Laureth Sulfate
Applications	<p>STEOL CS-270 PLUS is a biodegradable linear fatty alcohol ether sulfate. STEOL CS-270 PLUS is mild with excellent detergent and foaming properties in hard and soft water and is compatible with other anionics, nonionics, and alkaline builders. STEOL CS-270 PLUS proves improved mildness over sodium lauryl sulfate without sacrificing critical performance attributes such as foaming and viscosity response. Additional manufacturing considerations result in a low level of residual 1,4-dioxane in STEOL CS-270 PLUS.</p> <p>Common uses include:</p> <ul style="list-style-type: none"> • Personal care cleansers including shampoos, body washes and hand soaps • Hard surface cleanser such as general all-purpose cleaners • Hand dishwash liquids • Liquid laundry detergents • Vehicle and machinery washes • Institutional cleaning products including hand soaps, floor cleaners and all-purpose/multipurpose cleaners
Typical Properties	<p>Appearance at 25°C Yellow mobile paste</p> <p>Actives (MW 382), % 70</p> <p>1,4-Dioxane, ppm <10</p> <p>Level of ethoxylation (average) 2 moles</p> <p>pH, 10% aqueous 8.0</p> <p>Density at 25°C, g/mL (lbs/U.S. gal) 1.08 (8.9)</p> <p>Boiling Point, °C (°F) >100 (>212)</p> <p>Freeze Point, °C (°F) 5 (40)</p> <p>Pour Point, °C (°F) 1 (34)</p> <p>Flash Point, PMCC, °C (°F) >94 (>201)</p> <p>Sodium Chloride, % 0.5 max.</p> <p>Sodium Sulfate, % 1.0 max.</p> <p>Color (25% active), %T at 420 nm 90 min.</p> <p>Critical Micelle Concentration, mg/L 119</p> <p>RVOC, U.S. EPA, % 0</p> <p>Preservative Not required</p>



Environmental Effects

STEOL CS-270 PLUS is readily biodegradable. A detailed biodegradability statement is available upon request.

Health Effects

STEOL CS-270 PLUS is slightly toxic orally (LD50 > 2000 mg/kg) and causes mild to moderate skin and eye irritation at 10% active.

Storage & Handling

Normal safety precautions (e.g., gloves and safety goggles) should be employed when handling STEOL CS-270 PLUS. Contact with eyes, nose or prolonged contact with skin should be avoided. Wash thoroughly after handling STEOL CS-270 PLUS. See SDS for more information.

Standard Packaging: STEOL CS-270 PLUS is available in bulk quantities. For other package sizes, please consult your Stepan Sales Representative.

Bulk Storage Recommendations: STEOL CS-270 PLUS bulk storage should be in vessels of 316 stainless steel; tanks, pumps, pipes and heat exchangers made of 316 stainless steel are recommended. Rotary piston type (positive displacement only) pumps are recommended. Tank configuration recommended to have minimum 10° slope. Avoid dead spots and accumulation of product in tank or piping.

Product must be stored below 40°C (104°F). 1,4-dioxane levels in the product may increase over time. The rate of increase is affected by time, temperature and pH. The increase of 1,4-dioxane is minimized when product is stored at or below 25°C. Stepan encourages customers to test the 1,4-dioxane level of their final formulations in accordance with their established testing protocols. STEOL CS-270 PLUS will remain fluid and pumpable above 21°C (70°F).

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 practices should be used to control these exposures. See SDS for more information.

Clearances

The international inventories (country clearances) of STEOL CS-270 PLUS can be found in Section 15 of the Safety Data Sheet (SDS). 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. If you have any further questions regarding inventories, please contact North America Technical Service at techserv@stepan.com.

Product Stewardship

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

Additional Safety Information

A Safety Data Sheet (SDS) is available upon request.



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