

Product Bulletin

Product Name	STEOL® CS-330	
Chemical Structure	CH ₃ (CH ₂) ₁₀ CH ₂ (OCH ₂ CH ₂) ₃ OSO ₃ Na	
CAS Registry No.	68585-34-2 (Alternate CAS No. 9004-82-4)	
INCI Name	Sodium Laureth Sulfate	
Applications	<p>STEOL CS-330 is a sodium lauryl ether sulfate derived from fatty alcohols, ethoxylated to an average of 3 moles, and sulfated via Stepan's continuous SO₃ process.</p> <p>STEOL CS-330 is not only milder than sodium lauryl, 1 mole or 2 mole laureth sulfates but also exhibits greater salt tolerance and solubilizing properties. Its low irritation properties make it useful for mild cleansing products, as well as baby products.</p> <p>STEOL CS-330 offers excellent skin compatibility, along with good foam and viscosity characteristics, all important considerations in shampoo, hand soap, and bath product formulations.</p> <p>STEOL CS-330 based products can be readily thickened with salts, betaines, and amides, with the latter two also offering foam enrichment. By modifying the additive levels, formulas exhibiting a variety of performance and physical attributes can be developed. Since STEOL CS-330 is compatible with commonly used opacifiers and pearling agents, the formulator is afforded flexibility in developing the desired product appearance.</p>	
Typical Properties	Appearance at 25°C..... Clear liquid Actives (MW 422), %..... 28 Unsulfated Material, %..... 0.45 Sodium Chloride, %..... 0.03 Sodium Sulfate, %..... 0.16 pH, 10% Aqueous 7.5 Color (%T at 420 nm), as is..... 94 Density at 25°C, g/ml (lbs/U.S. gal)..... 1.03 (8.6) Preservative Formaldehyde	Viscosity at 25°C, cps..... 62 Viscosity at 60°C, cps..... 30 Cloud Point (as is), °C (°F) 2 (36) Freeze Point, °C (°F) -2 (29) Pour Point, °C (°F)..... 1 (34) Flash Point (PMCC), °C (°F)..... >94 (>201) Critical Micelle Concentration, mg/L 449 RVOC, U.S. EPA, %..... 0
Environmental Effects	Product is readily biodegradable. A detailed biodegradation statement is available upon request.	
Health Effects	STEOL CS-330 is practically non-toxic orally (LD ₅₀ is >5 g/kg) and causes mild to moderate skin and moderate eye irritation at 10% active.	
Storage & Handling	Normal safety precautions (i.e., gloves and safety goggles) should be employed when handling STEOL CS-330. Contact with the eyes and prolonged contact with the skin should be avoided. Wash thoroughly after handling material.	
	It is recommended that STEOL CS-330 be stored in sealed containers and kept at temperatures above 45°F (7°C). Avoid overheating or freezing. If material is frozen, mild heat and agitation are recommended to ensure the material is homogeneous before use.	
	Bulk Storage Information: Tanks made of 316 stainless steel or fiberglass with an Atlac 382 corrosion liner are recommended. Positive displacement gear pumps and piping should be 316 stainless steel. Recommended storage for bulk tanks is 90-100°F (32-38°C).	
	Standard Packaging: STEOL CS-330 is available in bulk and 55-gallon drums.	

Nov. 2020
Supersedes:
Jan. 2011

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Clearances

The international inventories (country clearances) of STEOL CS-330 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.

STEOL CS-330 is approved for use as inert ingredient under U.S. EPA 40 CFR 180.910.

STEOL CS-330 is available as Kosher Certified.

Formulation

SHOWER & BATH GEL

<u>Ingredients</u>	<u>Wt. % (as is)</u>	<u>Function</u>
1. Deionized Water	q.s. to 100.00	Solvent, Carrier
2. STEOL CS-330	57.70	Primary Surfactant
3. NINOL® 30-LL	3.50	Viscosity and Foam Booster
4. AMPHOSOL® CG	5.00	Secondary Surfactant
5. Polysorbate 20	0.30	Solubilizing Agent
6. Tetrasodium EDTA	0.20	Chelating Agent
7. Preservative	q.s.	Preservative
8. Glycerin	0.50	Conditioning Agent
9. Fragrance, Dye	q.s.	Additives
10. Citric Acid (50%)	q.s.	pH Adjuster
11. Sodium Chloride	q.s.	Viscosity Adjuster

Mixing Procedure:

Add first seven ingredients to Deionized Water, mixing well after each addition. Adjust pH with Citric Acid. Add Fragrance, Dye and Preservative, as desired. Adjust to desired viscosity with Sodium Chloride.

Physical Properties:

Appearance at 25° C.....	Clear liquid
pH, as is.....	6.5-7.0
Viscosity, as is.....	300-600 cps
Viscosity, with 0.25% Sodium Chloride	11,000 cps
Solids	23.5%

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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