

## Product Bulletin

### STEPANOL® WA-EXTRA HP

Product Name																																			
Chemical Structure	$\text{CH}_3(\text{CH}_2)_{10}\text{CH}_2\text{OSO}_3\text{Na}$																																		
INCI Name	Sodium Lauryl Sulfate																																		
CAS Registry No.	68585-47-7 (Alternate CAS No. 151-21-3)																																		
Chemical Description	STEPANOL WA-EXTRA HP is a sodium lauryl sulfate produced from the sulfation of fatty alcohol via Stepan's $\text{SO}_3$ process. This process allows the consistent production of a high purity product such as STEPANOL WA-EXTRA HP.																																		
Applications	STEPANOL WA-EXTRA HP can be used in a wide variety of personal care and detergent applications in which copious amounts of foam and excellent viscosity building properties are desired. Because of its high purity, STEPANOL WA-EXTRA HP can be used for formulations that are sensitive to levels of inorganic salts and free oil. It can be incorporated into shampoos, handsoaps, bath products, shaving creams and medicated ointments. STEPANOL WA-EXTRA HP can also be used in rug shampoos, light duty liquid detergents and fine fabric wash. STEPANOL WA-EXTRA HP is preserved by excess alkalinity which allows the formulator flexibility when choosing a preservative for their finished formulation.																																		
Typical Properties	<table border="0"> <tr> <td>Appearance at 25 °C</td> <td>Clear to pale yellow liquid</td> </tr> <tr> <td>Actives, (EW 302) %</td> <td>30</td> </tr> <tr> <td>pH, 10% Aqueous</td> <td>11.3</td> </tr> <tr> <td>Unulfated Alcohol, %</td> <td>0.30</td> </tr> <tr> <td>Sodium Chloride, %</td> <td>0.05</td> </tr> <tr> <td>Sodium Sulfate, %</td> <td>0.05</td> </tr> <tr> <td>Excell NaOH</td> <td>0.10</td> </tr> <tr> <td>Color, %Transmittance at 420 nm</td> <td>94</td> </tr> <tr> <td>Viscosity at 25 °C, cps</td> <td>200</td> </tr> <tr> <td>Viscosity at 60 °C, cps</td> <td>10</td> </tr> <tr> <td>Pour Point, °C (°F)</td> <td>13 (55)</td> </tr> <tr> <td>Flash Point (PMCC), °C (°F)</td> <td>&gt;94 (&gt;201)</td> </tr> <tr> <td>Density, g/ml (lbs./U.S. gal.)</td> <td>1.04 (8.65)</td> </tr> <tr> <td>Boiling Point, °C (°F)</td> <td>&gt;100 (&gt;212)</td> </tr> <tr> <td>Freeze Point, °C (°F)</td> <td>8 (46)</td> </tr> <tr> <td>RVOC, U.S. EPA, %</td> <td>0</td> </tr> <tr> <td>Preservative</td> <td>Not required</td> </tr> </table>	Appearance at 25 °C	Clear to pale yellow liquid	Actives, (EW 302) %	30	pH, 10% Aqueous	11.3	Unulfated Alcohol, %	0.30	Sodium Chloride, %	0.05	Sodium Sulfate, %	0.05	Excell NaOH	0.10	Color, %Transmittance at 420 nm	94	Viscosity at 25 °C, cps	200	Viscosity at 60 °C, cps	10	Pour Point, °C (°F)	13 (55)	Flash Point (PMCC), °C (°F)	>94 (>201)	Density, g/ml (lbs./U.S. gal.)	1.04 (8.65)	Boiling Point, °C (°F)	>100 (>212)	Freeze Point, °C (°F)	8 (46)	RVOC, U.S. EPA, %	0	Preservative	Not required
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Environmental Effects	Product is readily biodegradable. A detailed biodegradability statement is available upon request.																																		
Health Effects	STEPANOL WA-EXTRA HP is slightly toxic orally in rats ( $\text{LD}_{50}$ is between 1,000 to 2,000 mg/kg bw) and may cause severe skin and eye irritation at 10% active.																																		
Storage & Handling	<p>Normal safety precautions (i.e., gloves and safety goggles) should be employed when handling STEPANOL WA-EXTRA HP. Contact with the eyes and prolonged contact with the skin should be avoided. Wash thoroughly after handling material.</p> <p>It is recommended that STEPANOL WA-EXTRA HP be stored in sealed containers and kept at temperatures between 85 °F (29 °C) and 110 °F (43.3 °C). Avoid overheating or freezing. If material is frozen, mild heat and agitation are recommended to ensure the material is homogeneous before use.</p>																																		



## Storage & Handling

**Bulk Storage Information:** Material of construction: 304 stainless steel or 316 (or fiberglass with isophthalic resin, or HDPE). Gear pumps and piping should be 316 stainless steel. Recommended temperature for storage is 85-100 °F (29-43.3 °C). Optimum temperature would be between 85-90 °F. Max Temp is 120 °F (48.9 °C). Any hot water that is used to heat storage tanks, or trace heating elements should not exceed a temperature of 120 °F (48.9 °C).

## 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 practices should be used to control these exposures.

## Clearances

All components of STEPANOL WA-EXTRA HP are listed in the following countries; the registration numbers for the active ingredients are included in parentheses: Europe (EINECS 205-788-1), Japan (ENCS 2-1679), Canada (DSL 151-21-3), Australia (AICS 151-21-3), United States (TSCA 151-21-5), Philippines (PICCS 151-21-3), Korea (ECL Serial No. KE-21884) and China (IECSC 151-21-3).

STEPANOL WA-EXTRA HP is available as Kosher Certified.

STEPANOL WA-EXTRA HP meets the U.S. EPA Safe Choice Program's surfactant screen and is listed on [www.cleangredients.org](http://www.cleangredients.org) (an on-line database for green formulators). For further information, visit [www.cleangredients.org](http://www.cleangredients.org). Additional Stepan ingredient listing can be found at [www.stepan.com](http://www.stepan.com).

**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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