

### STEPANOL<sup>®</sup> WA-100 NF/USP

Product Name	CH <sub>3</sub> (CH <sub>2</sub> ) <sub>10</sub> CH <sub>2</sub> OSO <sub>3</sub> Na																						
Chemical Structure																							
INCI Name	Sodium Lauryl Sulfate																						
CAS Registry No.	151-21-3																						
Applications	<p>STEPANOL WA-100 NF/USP is a sodium lauryl sulfate produced from the sulfation of fatty alcohol via Stepan's SO<sub>3</sub> process. The product of this process is then spray dried to produce a high active powder of exceptional quality.</p> <p>STEPANOL WA-100 NF/USP can be used as a foaming agent and mouth dispersant in dentifrices. Because of its low levels of unsulfated material, STEPANOL WA-100 NF/USP will not cause toothpaste formulations to have the bitter taste associated with other sodium lauryl sulfates. STEPANOL WA-100 NF/USP can also be used in powdered formulations such as hand cleaners and powdered baths, and can be used in liquid hand soaps and shampoos.</p>																						
Typical Properties	<table border="0"> <tr> <td>Appearance at 25°C.....</td> <td>White powder</td> </tr> <tr> <td>Actives (MW 299), %.....</td> <td>97.59</td> </tr> <tr> <td>Unsulfated Material, %.....</td> <td>0.38</td> </tr> <tr> <td>Sodium Chloride, %.....</td> <td>0.02</td> </tr> <tr> <td>Sodium Sulfate, %.....</td> <td>0.56</td> </tr> <tr> <td>pH, 1% aqueous.....</td> <td>9.75</td> </tr> <tr> <td>Color (APHA), 10% active.....</td> <td>22.74</td> </tr> <tr> <td>Critical Micelle Concentration, mg/L.....</td> <td>389</td> </tr> <tr> <td>Density, approx. g/ml (lbs/U.S. gal).....</td> <td>0.48 (4.0)</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.....	White powder	Actives (MW 299), %.....	97.59	Unsulfated Material, %.....	0.38	Sodium Chloride, %.....	0.02	Sodium Sulfate, %.....	0.56	pH, 1% aqueous.....	9.75	Color (APHA), 10% active.....	22.74	Critical Micelle Concentration, mg/L.....	389	Density, approx. g/ml (lbs/U.S. gal).....	0.48 (4.0)	RVOC, U.S. EPA, %.....	0	Preservative.....	Not required
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Biodegradability	Product is readily biodegradable. A detailed biodegradability statement is available upon request.																						
Toxicity	STEPANOL WA-100 NF/USP is slightly toxic orally (LD <sub>50</sub> is between 0.8 to 1.1 g/kg) and causes moderate to severe skin and eye irritation at 10% active.																						
Storage & Handling	<p>Normal safety precautions (i.e., dust mask, goggles and gloves) should be worn when handling STEPANOL WA-100 NF/USP. This product should be used in a well-ventilated area. Avoid inhaling dust. 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-100 NF/USP be stored in sealed containers and kept in a cool, dry place to avoid agglomeration.</p> <p><u>Standard Packaging:</u> STEPANOL WA-100 NF/USP is available in 30 gallon drums (net weight 100 lb/ 45 kg) and 55 gallon drums (net weight 183 lb/83 kg) and pallets of 50 lb. bags.</p>																						



Clearances

All components of STEPANOL WA-100 NF/USP 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 151-21-3), Philippines (PICCS 151-21-3), Korea (ECL Serial No. KE-21884), Switzerland (Swiss No. G-2596) and China (IECSC 151-21-3).

STEPANOL WA-100 NF/USP is available as Kosher Certified.

STEPANOL WA-100 NF/USP complies with the strength and purity standards of the following: United States Pharmacopeia/National Formulary (USP/NF), British Pharmacopoeia (BP), European Pharmacopoeia (EP), and the Japanese Pharmacopoeia (JP) as determined by Stepan Company assays and tests. Stepan products are manufactured according to ISO 9001:2008 standards. These standards provide the framework for the GMP concepts of our bulk pharmaceutical chemicals.

**STEPANOL WA-100 NF/USP SPECIFICATIONS COMPARED TO COMPENDIAL REQUIREMENTS**

Parameter	Stepan Product		Compendia		
	WA-100	USP	BP	EP	JP
Actives (% min.)	97		85	85	
Unsulfated alcohol (% max.)	0.5	4.0	4.0	4.0	4.0
Total alcohol (% min.)	59	59			59
NaCl (% max.)	0.2				
Na <sub>2</sub> SO <sub>4</sub> (% max.)	1.0				
Total salts (NaCl + Na <sub>2</sub> SO <sub>4</sub> )		8.0	8.0	8.0	8.0
Water (% max.)	1.0				5.0
Alkalinity (ml/g max.)	0.5	0.6	0.5	0.5	0.6
Heavy Metals (ppm max.)	20	20			

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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