**STEPLANATE® SXS**

**Chemical Description**
Sodium Xylenesulfonate

**CAS Registry No.**
1300-72-7

**INCI Name**
Sodium Xylenesulfonate

**Applications**
STEPLANATE SXS is used in liquid detergent formulations as a solubilizer, coupling agent and cloud point depressant. The hydrotrropic or solubilizing property of STEPLANATE SXS allows materials to be incorporated in formulations that normally are incompatible. STEPLANATE SXS is also useful in lowering the cloud point or crystallization temperature of complex blends. STEPLANATE SXS contains no alcohol so it will not decrease the flash point of your formulation. It is also chemically inert in most formulations.

STEPLANATE SXS is commonly used as a coupling agent for surfactants in phosphate and silicate solutions. The coupling ability of STEPLANATE SXS makes it possible to formulate detergents containing high percentages of inorganic builders. Heavy duty cleaners, wax strippers and complex dishwashing detergents can also be prepared without the use of organic solvents. It is also used as a non-caking agent in spray dried detergents.

**Typical Properties**
- **Appearance at 25 °C**: Clear liquid
- **pH, as is**: 7.5 - 9.5
- **Actives, %**: 40 - 42
- **Solids, % by Wt.**: 42 - 44
- **Crystallization Point, °C (°F)**: 16 (60)
- **Pour Point, °C (°F)**: -23 (-9)
- **Freeze Point, °C (°F)**: -7 (20)
- **Cloud Point, °C (°F)**: -5 (23)
- **Color, Klett (as is)**: 50 max.
- **Viscosity at 0 °C, cps**: 21
- **Viscosity at 25 °C, cps**: 7
- **Viscosity at 60 °C, cps**: 2
- **Flash Point (PMCC), °C (°F)**: >94 (>201)
- **Density, g/ml (lbs/U.S. gal)**: 1.164 (9.7)

**Environmental Effects**
Product is readily biodegradable. A detailed biodegradability statement is available upon request.

**Health Effects**
STEPLANATE SXS is practically non-toxic orally (LD₅₀ = 5 - 6 g/kg); it causes mild eye irritation and skin irritation. The product is also practically non-toxic to relatively harmless to aquatic organisms.

**Stepanate® SXS** is a registered trademark of Stepan Company.
Storage & Handling

Normal safety precautions (i.e., gloves and safety goggles) should be employed when handling STEPANATE SXS. Contact with the eyes and prolonged contact with the skin should be avoided. Wash thoroughly after handling material.

It is recommended that STEPANATE SXS be stored in closed containers and kept in a cool, dry place. Liquipak or HDPE plastic drums are recommended for storage of STEPANATE SXS. If the material is exposed to cooler temperatures, it can crystallize and separate. It should be heated slowly and agitated gently to insure its homogeneity before use.

**Bulk Storage Information:** STEPANATE SXS should be stored in 316 stainless steel or fiberglass with a corrosion liner. Mild agitation is recommended while storing to maintain homogeneity. Material should be stored between 23 – 40 °C (75 – 105 °F). An internal hairpin coil of 316 stainless steel with low pressure steam (under 50 psig) should be used if heating is required. Pumps, pipes and transfer lines should be 316 stainless steel.

**Standard Packaging:** STEPANATE SXS is available in drums and in bulk quantities.

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

The international inventories (country clearances) of STEPANATE SXS 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 American Technical Service at techserv@stepan.com.

STEPANATE SXS is available in Kosher grade.

STEPANATE SXS is approved in the United States for use under 40CFR 180.920.

STEPANATE SXS meets the U.S. EPA Safe Choice Program’s surfactant screen and is listed on www.cleangredients.org (an on-line database for green formulators). For further information, visit www.cleangredients.org. Additional Stepan ingredient listing can be found at www.stepan.com.

Product Stewardship

Additional Safety Information

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

A Safety Data Sheet is available upon request.

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