

Product Bulletin

Product Name	STEPOSOL[®] SB-D
Chemical Description	STEPOSOL SB-D is a methyl ester derived from soybean oil.
CAS Registry No.	67784-80-9
Chemical Name	Soybean oil, methyl ester
INCI Name	Methyl soyate
Applications	<p><u>Functional Properties</u></p> <ul style="list-style-type: none"> • Contains no petroleum ingredients • Superior lubricating agent • Replacement for solvents such as naphtha, d-limonene, kerosene and mineral spirits <p><u>End Product Uses</u></p> <ul style="list-style-type: none"> • Waterless Hand Cleaner • Adhesive Remover • Floor Scrubber • Mold Release • Lacquer Thinners • Touchless Carwash • Hood/Grill Oven Cleaner • Ink Remover
Typical Properties	<p>Appearance at 25°C.....Clear liquid</p> <p>Viscosity at 25°C, cps 15</p> <p>Density at 25°C, g/ml (lbs/U.S. gal)..... 0.88 (7.3)</p> <p>Actives, % 100</p> <p>Color, Gardner 1</p> <p>Color, APHA..... 58</p> <p>Cloud Point, °C (°F) -2.1 (28.2)</p> <p>Pour Point, °C (°F).....-2.7 (27.1)</p> <p>Freeze Point, °C (°F).....-7.7 (18.1)</p> <p>Melting Point, °C (°F).....-0.6 (30.9)</p> <p>Boiling Point, °C (°F)..... 341 (646)</p> <p>Flash Point, PMCC, °C (°F)>94 (>201)</p> <p>Refractive Index at 20°C 1.458</p> <p>Surface Tension (as is), dynes/cm 31.5</p> <p>Kauri-Butanol Value 59</p> <p>Vapor Pressure at 20°C, mm Hg..... 0.05</p> <p>Evaporation Rate (Butyl Acetate =1) <0.01</p> <p>VOC, CARB 310, % 0.03</p> <p>VOC, U.S. EPA Method 24, % 4</p> <p>Solubility</p> <p> Water Insoluble</p> <p> Methanol Soluble</p> <p> Kerosene Soluble</p> <p> Xylene..... Soluble</p>
Biodegradability	Product is biodegradable. Additional information is available upon request.
Toxicity	<p>STEPOSOL SB-D is practically non-toxic orally (LD₅₀>5 g/kg) and it causes mild skin and eye irritation.</p> <p>STEPOSOL[®] is a registered trademark of Stepan Company</p>



Storage & Handling

Normal safety precautions (i.e. gloves and safety goggles) should be employed when handling STEPOSOL SB-D. Contact with eyes and prolonged contact with skin should be avoided. Wash thoroughly after handling materials. Product temperatures over 130°F (54°C) are not recommended.

Being derived from soybean oil, STEPOSOL SB-D contains polyunsaturated fatty acid methyl esters that can spontaneously combust. Oily rags, presenting a large surface area for air contact, should be washed out or stored where there can be no fire hazard.

STEPOSOL SB-D can be stored in vessels of carbon steel, but 316 or 304 stainless steel is preferred. Tanks should be closed with venting through a gooseneck vent. STEPOSOL SB-D should be stored between 50-110°F (10-43°C). External steam panel coils can be used if heating is required. Pumps, pipes, and transfer lines can be carbon steel, but 316 or 304 stainless is preferred. Rubber hoses are not recommended for extended use as STEPOSOL SB-D may degrade rubber. Drums should be stored sealed at temperatures of 50-110°F (10-43°C).

Standard Packaging: Available in 374 lb (170 kg) steel closed head unlined drums or bulk.

Recommended Drum Storage: Drums should be stored sealed at temperatures of 50-110°F (10-43°C).

Bulk Storage Information: STEPOSOL SB-D can be stored in vessels of carbon steel, but 316 or 304 stainless steel is preferred. Tanks should be closed with venting through a gooseneck vent. STEPOSOL SB-D should be stored between 50-110°F (10-43°C). External steam panel coils can be used if heating is required. Pumps, pipes, and transfer lines can be carbon steel, but 316 or 304 stainless is preferred. Rubber hoses are not recommended for extended use as STEPOSOL SB-D.

Clearances

All components of STEPOSOL SB-D are listed in the following countries; the registration numbers for the active ingredients are included in parentheses: United States (TSCA 67784-80-9), Europe (EINECS 267-055-2), Canada (DSL 67784-80-9), Korea (ECL Serial No. KE-31749), China (E IECSC 67784-80-9), and Australia (AICS 67784-80-9).

Per the California Air Resources Board's (CARB) Consumer Product Rule, OTC Model Rule and Federal VOC Standards, STEPOSOL SB-D is exempt from VOC limit requirements because it is a LVP-VOC (low vapor pressure VOC). All regulations define an LVP-VOC as a compound or mixture which meets one of the following criteria: 1) The compound has a vapor pressure of less than 0.1 mm Hg at 20°C; 2) the compound has more than 12 carbon atoms, or a mixture comprised solely of compounds with more than 12 carbon atoms and the vapor pressure is unknown or 3) the compound has a boiling point greater than 216°C.

Additional Safety Information

A Material Safety Data Sheet is available upon request.

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