

SULFOCHEM™ B-NBB SURFACTANT BLEND



Material Safety Data Sheet  
SULFOCHEM™ B-NBB SURFACTANT BLEND

Prepared according to 29CFR 1910.1200.

**1 Chemical Product and Company Identification**

*The Lubrizol Corporation  
29400 Lakeland Boulevard  
Wickliffe, Ohio 44092  
Tel: (440) 943-4200*

**Product Trade Name** SULFOCHEM™ B-NBB SURFACTANT BLEND  
**CAS Number** Not applicable for mixtures.  
**Synonyms** None.  
**Generic Chemical Name** Mixture.  
**Product Type** Specialty Surfactants  
**Preparation/Revision Date** 13 March 2013  
**Transportation Emergency Phone No.** FOR TRANSPORT EMERGENCY call CHEMTREC: (+1) 703-527-3887 (outside the U.S.), 1-800-424-9300 (in the U.S.)  
**MSDS No.** 22703310-1512323-5050321-102103

**2 Hazards Identification**

**Appearance** Clear to hazy yellow liquid.  
**Odor** Not Available  
**Principal Hazards** Caution.  

- May cause eye irritation.
- May cause skin irritation.
- May cause respiratory tract irritation.

See Section 11 for complete health hazard information.

**3 Composition/Information on Ingredients**

**Hazardous Ingredients**

Comp	CAS No.	Percentage (by wt.)	Carcinogen
Disodium lauroampho diacetate	68608-66-2	From 5 to 9.9 percent	N/E
Cocamidopropyl betaine	61789-40-0	From 5 to 9.9 percent	N/E
Glycerin	56-81-5	From 5 to 9.9 percent	N/E
Dodecyloxypoly(ethyleneoxy) acetic acid sodium salt	Confidential.	From 1 to 4.9 percent	N/E

(N/E) - None established

**4 First Aid Measures**

**Eyes** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical attention.  
**Skin** Wash with soap and water. Remove contaminated clothing. If skin irritation occurs, get medical attention.  
**Inhalation** Remove exposed person to fresh air if adverse effects are observed. Call a poison center or doctor if exposed or you feel unwell.  
**Oral** Treat symptomatically. Get medical attention.  
**Additional Information** Note to physician: Treat symptomatically.

**5 Fire Fighting Measures**

**Flash Point** >= 101 °C, 213.8 °F PMCC (Minimum)  
**Extinguishing Media** CO2, dry chemical, foam, water spray, water fog.  
**Firefighting Procedures** Wear full protective firegear including self-containing breathing apparatus operated in the positive pressure mode with full facepiece, coat, pants, gloves and boots. Water may be ineffective fighting fires.  
**Unusual Fire & Explosion Hazards** Material will not burn until water has been evaporated. Container may rupture on heating. See section 10 for additional information.

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6	<b>Accidental Release Measures</b>
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**Spill Procedures** Personal Protective Equipment must be worn, see Personal Protection Section for PPE recommendations. Take precautions to avoid release to the environment. Ventilate area if spilled in confined space or other poorly ventilated areas. Prevent entry into sewers and waterways, dispose of in accordance with all federal, state and local environmental regulation. Spilled liquid and dried film are slippery. Use care to avoid falls. Pick up free liquid for recycle and/or disposal. Residual liquid can be absorbed on inert material.

7	<b>Handling and Storage</b>
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**Pumping Temperature** Not determined.  
**Maximum Handling Temperature** Not determined.  
**Handling Procedures** Keep containers closed when not in use. Do not discharge into drains or the environment, dispose to an authorized waste collection point. Use appropriate containment to avoid environmental contamination. Avoid contact with skin or eyes. When handling, do not eat, drink, or smoke. Avoid drinking, tasting, swallowing or ingesting this product. Avoid inhalation of aerosol, mist, spray, fume or vapor. Avoid breathing dust, fume, gas, mist, vapors or spray. Minimize contact with air to reduce contamination with mold, fungus, or other organisms which could cause decomposition or spoilage. Wash thoroughly after handling. Launder contaminated clothing before reuse. Empty container contains product residue which may exhibit hazards of product. Dispose of packaging or containers in accordance with local, regional, national and international regulations.  
**Maximum Storage Temperature** 48.89 °C, 120 °F  
**Storage Procedures** Take precautions to avoid release to the environment. Keep from freezing. Store in a cool, dry, well-ventilated area. Keep container closed when not in use. Do not store at temperatures greater than 120 deg F (49 deg C). Do not store in open, unlabeled or mislabeled containers. See section 10 for incompatible materials.  
**Maximum Loading Temperature** Not determined.

8	<b>Exposure Controls/Personal Protection</b>
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**Exposure Limits**

Comp	Exposure Guidelines					
	OSHA		ACGIH		Other	
	TWA	STEL	TWA	STEL	TWA	STEL
Glycerin	15 mg/cu. M	N/E	10 mg/cu. M	N/E	N/E	N/E

- (s) - Skin exposure
- (p) - Proposed limit
- (c) - Ceiling exposure
- (l) - Recommended exposure limit
- (u) - Supplier recommended exposure limit
- (N/E) - None established

**Other Exposure Limits** This product contains formaldehyde, which has an OSHA PEL TWA of 0.75 ppm and ACGIH TLV TWA of 0.3 ppm.  
**Engineering Controls** Use material in well ventilated area only. Additional ventilation or exhaust may be required to maintain air concentrations below recommended exposure limits. Prevent inhalation by providing effective general and, when necessary, local exhaust ventilation to draw spray, aerosol, fume, mist, or vapor away from workers.  
**Gloves Procedures** Use good industrial hygiene practices to avoid skin contact. If contact with the material may occur wear chemically protective gloves.  
**Eye Protection** Safety Glasses.  
**Respiratory Protection** Use NIOSH/MSHA approved respirator with a combination organic vapor and high efficiency filter cartridge if recommended exposure limit is exceeded. Use self-contained breathing apparatus for entry into confined space, for other poorly ventilated areas and for large spill clean-up sites.  
**Clothing Recommendation** Wear a chemically protective apron when contact with material may occur. Do not wear rings, watches or similar apparel that could entrap the material and cause a skin reaction.

9	<b>Physical and Chemical Properties</b>
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**Flash Point**  $\geq 101$  °C, 213.8 °F PMCC (Minimum)  
**Upper Flammable Limit** Not determined.  
**Lower Flammable Limit** Not determined.  
**Autoignition Point** Not determined.  
**Explosion Data** Material does not have explosive properties.  
**Vapor Pressure** ~ 18 mm Hg (20 °C)  
**pH** 7.5 - 8.5  
**Specific Gravity** 1.09 (20 °C)  
**Bulk Density** 9.09 Lb/gal, 1.09 Kg/L  
**Water Solubility** Soluble.  
**Percent Solid** 43.5% By Weight

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Percent Volatile	55 - 58% By Weight
Volatile Organic Compound	Not determined.
Vapor Density	< 1 Air=1
Evaporation Rate	< 1 Butyl acetate=1
Odor	Not Available
Appearance	Clear to hazy yellow liquid.
Viscosity	< 5000 Centipoise (25 °C)
Odor Threshold	Not determined.
Boiling Point	~ 100 °C, ~ 212 °F(Typical)
Pour Point Temperature	Not determined.
Melting / Freezing Point	~ 0 °C, ~ 32 °F

*The above data are typical values and do not constitute a specification. Vapor pressure data are calculated unless otherwise noted.*

10	<b>Stability and Reactivity</b>
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<b>Stability</b>	Material is normally stable at moderately elevated temperatures and pressures.
<b>Decomposition Temperature</b>	Not determined.
<b>Incompatibility</b>	Strong acids. Strong bases. Oxidizing agents.
<b>Polymerization</b>	Will not occur.
<b>Thermal Decomposition</b>	Smoke, carbon monoxide, carbon dioxide, aldehydes and other products of incomplete combustion. Irritating and toxic substances may be emitted upon combustion, burning, or decomposition of dry solids.
<b>Conditions to Avoid</b>	Do not freeze.

11	<b>Toxicological Information</b>
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– ACUTE EXPOSURE –

<b>Eye Irritation</b>	Weak to moderate eye irritant. Does not meet EU R36 criteria. Based on data from components or similar materials.
<b>Skin Irritation</b>	May cause mild skin irritation. Does not meet Canadian D2B or EU R38 criteria. Based on data from components or similar materials. Prolonged or repeated skin contact as from clothing wet with material may cause dermatitis. Symptoms may include redness, edema, drying, and cracking of the skin.
<b>Respiratory Irritation</b>	May cause nose, throat, and lung irritation. Based on data from components or similar materials. Vapor or mist is irritating to mucous membranes and upper respiratory tract.
<b>Dermal Toxicity</b>	The LD50 in rabbits is > 2000 mg/Kg. Based on data from components or similar materials. Not expected to be absorbed through skin. Based on data from components or similar materials.
<b>Inhalation Toxicity</b>	Avoid inhalation of mists or vapors.
<b>Oral Toxicity</b>	The LD50 in rats is > 10,000 mg/Kg. Based on data from components or similar materials. Swallowing material may cause irritation of the gastrointestinal lining, nausea, vomiting, diarrhea, and abdominal pain.
<b>Dermal Sensitization</b>	No data available to indicate product or components may be a skin sensitizer.
<b>Inhalation Sensitization</b>	No data available to indicate product or components may be respiratory sensitizers.

– CHRONIC EXPOSURE –

<b>Chronic Toxicity</b>	No data available to indicate product or components present at greater than 1% are chronic health hazards.
<b>Carcinogenicity</b>	No data available to indicate any components present at greater than 0.1% may present a carcinogenic hazard.
<b>Mutagenicity</b>	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
<b>Reproductive Toxicity</b>	No data available to indicate either product or components present at greater than 0.1% that may cause reproductive toxicity.
<b>Teratogenicity</b>	No data available to indicate product or any components contained at greater than 0.1% may cause birth defects.

– ADDITIONAL INFORMATION –

<b>Other</b>	No other health hazards known.
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12	<b>Ecological Information</b>
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– ENVIRONMENTAL TOXICITY –

<b>Freshwater Fish Toxicity</b>	The acute LC50 is 10 - 100 mg/L based on component data.
<b>Freshwater Invertebrates Toxicity</b>	The acute EC50 is 10 - 100 mg/L based on component data.
<b>Algal Inhibition</b>	The acute EC50 is 10 - 100 mg/L based on component data.
<b>Saltwater Fish Toxicity</b>	Not determined.
<b>Saltwater Invertebrates Toxicity</b>	Not determined.
<b>Bacteria Toxicity</b>	Not determined.
<b>Miscellaneous Toxicity</b>	Not determined.

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## – ENVIRONMENTAL FATE –

<b>Biodegradation</b>	At least 75% of the components in this product show rapid biodegradation based on OECD 301-type test data.
<b>Bioaccumulation</b>	Less than 1.0% of the components bioconcentrate in aquatic organisms.
<b>Soil Mobility</b>	Not determined.

<b>13</b>	<b>Disposal Considerations</b>
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**Waste Disposal** This material, if discarded, is not a hazardous waste under RCRA Regulation 40 CFR 261. Treatment, storage, transportation, and disposal must be in accordance with applicable Federal, State/Provincial, and Local regulations.

<b>14</b>	<b>Transport Information</b>
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<b>ICAO/IATA I</b>	Not regulated.
<b>ICAO/IATA II</b>	Not regulated.
<b>IMDG</b>	Not regulated.
<b>IMDG EMS Fire</b>	Not applicable.
<b>IMDG EMS Spill</b>	Not applicable.
<b>IMDG MFAG</b>	Not applicable.
<b>MARPOL Annex II</b>	Not determined.
<b>USCG Compatibility</b>	Not determined.
<b>U.S. DOT Bulk</b>	Not regulated.
<b>DOT NAERG</b>	Not applicable.
<b>U.S. DOT (Intermediate)</b>	Not regulated.
<b>U.S. DOT Intermediate NAERG</b>	Not applicable.
<b>U.S. DOT Non-Bulk</b>	Not regulated.
<b>U.S. DOT Non-Bulk NAERG</b>	Not applicable.
<b>Canada</b>	Not regulated.
<b>Mexico</b>	Not regulated.
<b>Bulk Quantity</b>	50000 KG, 110230 lbs.
<b>Intermediate Quantity</b>	11000 KG, 24251 lbs.
<b>Non-Bulk Quantity</b>	400 KG, 882 lbs.

*Review classification requirements before shipping materials at elevated temperatures.*

<b>15</b>	<b>Regulatory Information</b>
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### – Global Chemical Inventories –

<b>USA</b>	All components of this material are on the US TSCA Inventory or are exempt.
<b>Other TSCA Reg.</b>	None known.
<b>EU</b>	To obtain information on the REACH compliance status of this product, please visit <a href="http://Lubrizol.com/REACH">Lubrizol.com/REACH</a> , or e-mail us at <a href="mailto:REACH_MSDDS_INQUIRIES@Lubrizol.com">REACH_MSDDS_INQUIRIES@Lubrizol.com</a>
<b>Japan</b>	This product requires notification in Japan.
<b>Australia</b>	All components are in compliance with chemical notification requirements in Australia.
<b>New Zealand</b>	All components are in compliance with chemical notification requirements in New Zealand.
<b>Canada</b>	All components are in compliance with the Canadian Environmental Protection Act and are present on the Domestic Substances List.
<b>Switzerland</b>	All components are in compliance with the Environmentally Hazardous Substances Ordinance in Switzerland.
<b>Korea</b>	This product requires notification before sale in Korea.
<b>Philippines</b>	All components are in compliance with the Philippines Toxic Substances and Hazardous and Nuclear Wastes Control Act of 1990 (R.A. 6969).
<b>China</b>	All components of this product are listed on the Inventory of Existing Chemical Substances in China.
<b>Taiwan</b>	May require notification before sale in Taiwan.

### – Other U.S. Federal Regulations –

<b>SARA Ext. Haz. Subst.</b>	This product does not contain greater than 1.0% of any chemical substance on the SARA Extremely Hazardous Substances list.								
<b>SARA Section 313</b>	This product does not contain greater than 1.0% (greater than 0.1% for carcinogenic substance) of any chemical substances listed under SARA Section 313.								
<b>SARA 311 Classifications</b>	<table border="1"> <tr><td>Acute Hazard</td><td>Yes</td></tr> <tr><td>Chronic Hazard</td><td>No</td></tr> <tr><td>Fire Hazard</td><td>No</td></tr> <tr><td>Reactivity Hazard</td><td>No</td></tr> </table>	Acute Hazard	Yes	Chronic Hazard	No	Fire Hazard	No	Reactivity Hazard	No
Acute Hazard	Yes								
Chronic Hazard	No								
Fire Hazard	No								
Reactivity Hazard	No								
<b>CERCLA Hazardous Substances</b>	None known.								

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## – State Regulations –

### Cal. Prop. 65

This product contains the following chemical(s) known to the state of California to cause cancer and/or birth defects based on maximum impurity levels of components: < 0.01 ppm lead 9 ppm Dichloroacetic acid, CAS no. 79-43-6 0.001% 1, 4 Dioxane, CAS no. 123-91-1 0.001% Substituted phenol, CAS no. 25013-16-5 0.055% Formaldehyde, CAS no. 50-00-0

## – Product Registrations –

U.S. Fuel Registration Not applicable.  
 Finnish Registration Number Not Registered  
 Swedish Registration Number Not Registered  
 Norwegian Registration Number Not Registered  
 Danish Registration Number Not Registered  
 Swiss Registration Number Not Registered  
 Italian Registration Number Not Registered

## – Other / International –

Miscellaneous Regulatory Information Not determined.

16	Other Information
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### US NFPA Codes

Health	Fire	Reactivity	Special
1	1	0	N/E

(N/E) - None established

### HMIS Codes

Health	Fire	Reactivity
1	1	0

### Precautionary Labels

Caution.  
 • May cause eye irritation.  
 • May cause skin irritation.  
 • May cause respiratory tract irritation.

### Revision Indicators

Section: 3 Hazardous ingredients.	Changed: 13 March 2013
Section: 5 Flash point.	Changed: 27 May 2012
Section: 8 Hazardous ingredients.	Changed: 13 March 2013
Section: 9 Flash point.	Changed: 27 May 2012
Section: 11 Inhalation toxicity.	Changed: 27 May 2012

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