Section 1 - Chemical Product and Company Identification

MSDS Name: Aerosol OT Solution 75%
Catalog Numbers: A345-500
Synonyms: Sodium dioctyl sulfosuccinate in mixture of ethanol and water.
Company Identification:
Fisher Scientific
One Reagent Lane
Fair Lawn, NJ 07410
For information in the US, call:
201-796-7100
Emergency Number US:
201-796-7100
CHEMTREC Phone Number, US:
800-424-9300

Section 2 - Composition, Information on Ingredients

Risk Phrases: 11
CAS#: 64-17-5
Chemical Name: Ethyl alcohol
%: 6-7
EINECS#: 200-578-6
Hazard Symbols: F

Risk Phrases: 11 36 66 67
CAS#: 67-64-1
Chemical Name: Acetone
%: <0.55
EINECS#: 200-662-2
Hazard Symbols: F XI

Risk Phrases:
CAS#: 104-76-7
Chemical Name: 2-Ethylhexanol
%: <1
EINECS#: 203-234-3
Hazard Symbols:

Risk Phrases:
CAS#: 577-11-7
Chemical Name: Dioctyl sodium sulfosuccinate
%: 73-75
EINECS#: 209-406-4
Hazard Symbols:
Risk Phrases:

Chemical Name: Water

%: 18-21

EINECS#: 231-791-2

Hazard Symbols:

Text for R-phrases: see Section 16

Warning! Flammable liquid and vapor. May cause central nervous system depression. Causes eye and skin irritation. May cause reproductive and fetal effects. Target Organs: Central nervous system, eyes, skin.

Potential Health Effects

Eye: Causes eye irritation.

Skin: Causes skin irritation. A single prolonged skin exposure is not likely to result in the material being absorbed in harmful amounts.

Ingestion: No hazard expected in normal industrial use. May cause central nervous system depression.

Inhalation: May cause respiratory tract irritation. Overexposure produces central nervous system depression.

Chronic: Prolonged or repeated exposure may cause adverse reproductive effects.

Section 4 - First Aid Measures

Eyes: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical aid.

Skin: In case of contact, flush skin with plenty of water. Remove contaminated clothing and shoes. Get medical aid if irritation develops and persists. Wash clothing before reuse.

Ingestion: If swallowed, do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical aid.

Inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

Notes to Physician:

Section 5 - Fire Fighting Measures

General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Vapors can travel to a source of ignition and flash back. Use water spray to keep fire-exposed containers cool. Vapors may be heavier than air. They can spread along the ground and collect in low or confined areas.

Extinguishing Media: Solid streams of water may be ineffective and spread material. Use water spray, alcohol foam, CO2, dry chemical.

Autoignition Temperature: Not available.

Flash Point: 29 deg C ( 84.20 deg F)

Explosion Limits: Lower: 3.3% for EtOH

Explosion Limits: Upper: 19% for EtOH

NFPA Rating: health: 2; flammability: 3; instability: 0;
Section 6 - Accidental Release Measures

General Information:
Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks:
Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Avoid runoff into storm sewers and ditches which lead to waterways. Remove all sources of ignition. A vapor suppressing foam may be used to reduce vapors. Water spray may reduce vapor but may not prevent ignition in closed spaces.

Section 7 - Handling and Storage

Wash thoroughly after handling. Ground and bond containers when transferring material. Use spark-proof tools and explosion proof equipment. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Use only with adequate ventilation. Keep away from heat, sparks and flame. Avoid breathing vapor or mist.

Keep away from sources of ignition. Store in a cool, dry, well-ventilated area away from incompatible substances. Keep containers closed as evaporation of water and solvent may cause gelation.

Section 8 - Exposure Controls, Personal Protection

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH</th>
<th>NIOSH</th>
<th>OSHA - Final PELs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethyl alcohol</td>
<td>1000 ppm</td>
<td>1000 ppm TWA; 1900 mg/m³ TWA</td>
<td>1900 ppm TWA;</td>
</tr>
<tr>
<td>Acetone</td>
<td>500 ppm; 750 ppm</td>
<td>250 ppm TWA; 590 mg/m³ TWA 2500 ppm IDLH (10% LEL)</td>
<td>2400 mg/m³ TWA</td>
</tr>
<tr>
<td>2-Ethylhexanol</td>
<td>none listed</td>
<td>none listed</td>
<td>none listed</td>
</tr>
<tr>
<td>Dioctyl sodium sulfosuccinate</td>
<td>none listed</td>
<td>none listed</td>
<td>none listed</td>
</tr>
<tr>
<td>Water</td>
<td>none listed</td>
<td>none listed</td>
<td>none listed</td>
</tr>
</tbody>
</table>

OSHA Vacated PELs: Ethyl alcohol: 1000 ppm TWA; 1900 mg/m³ TWA Acetone: 750 ppm TWA; 1800 mg/m³ TWA 2-Ethylhexanol: None listed Dioctyl sodium sulfosuccinate: None listed Water: None listed

Engineering Controls:
Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

Exposure Limits

Personal Protective Equipment
Eyes: Wear chemical splash goggles.
Skin: Wear appropriate protective gloves to prevent skin exposure.
Clothing: Wear appropriate protective clothing to prevent skin exposure.

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a Respirators: NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Section 9 - Physical and Chemical Properties

Physical State: Liquid
Color: clear colorless
Odor: faint odor
pH: 5-7 (1% aq soln)
Vapor Pressure: Not available
Vapor Density: Not available
Evaporation Rate: Not available
Viscosity: Not available
Boiling Point: 78 deg C (172.40°F)
Freezing/Melting Point: Not available
Decomposition Temperature: Not available
Solubility in water: 1.5 g/100 ml @ 25°C
Specific Gravity/Density: 1.09
Molecular Formula: Not applicable.

Section 10 - Stability and Reactivity
Chemical Stability: Stable under normal temperatures and pressures.
Conditions to Avoid: Ignition sources, excess heat, allowing solvents to evaporate.
Incompatibilities with Other Materials: Strong oxidizing agents, strong acids, strong bases, steel.
Hazardous Decomposition Products: Carbon monoxide, oxides of sulfur, carbon dioxide.
Hazardous Polymerization: Will not occur.

Section 11 - Toxicological Information
CAS# 64-17-5: KQ6300000
CAS# 67-64-1: AL3150000
CAS# 104-76-7: MP0350000
CAS# 577-11-7: WN0525000
CAS# 7732-18-5: ZC0110000

RTECS:

CAS# 64-17-5: Draize test, rabbit, eye: 500 mg Severe;
Draize test, rabbit, eye: 500 mg/24H Mild;
Draize test, rabbit, skin: 20 mg/24H Moderate;
Inhalation, mouse: LC50 = 39 gm/m3/4H;
Inhalation, rat: LC50 = 20000 ppm/10H;
Oral, mouse: LD50 = 3450 mg/kg;
Oral, rabbit: LD50 = 6300 mg/kg;
Oral, rat: LD50 = 7060 mg/kg;
Oral, rat: LD50 = 9000 mg/kg;

RTECS:

CAS# 67-64-1: Dermal, guinea pig: LD50 = >9400 uL/kg;
Draize test, rabbit, eye: 20 mg Severe;
Draize test, rabbit, eye: 20 mg/24H Moderate;
Draize test, rabbit, eye: 10 uL Mild;
Draize test, rabbit, skin: 500 mg/24H Mild;
Inhalation, mouse: LC50 = 44 gm/m3/4H;
Inhalation, rat: LC50 = 50100 mg/m3/8H;
Oral, mouse: LD50 = 3 gm/kg;
Oral, rabbit: LD50 = 5340 mg/kg;
Oral, rat: LD50 = 5800 mg/kg;

LD50/LC50:

RTECS:

CAS# 104-76-7: Draize test, rabbit, eye: 20 mg Severe;
Draize test, rabbit, eye: 20 mg/24H Moderate;
Draize test, rabbit, skin: 500 mg/24H Moderate;
Oral, mouse: LD50 = 2500 mg/kg;
Oral, rabbit: LD50 = 1180 mg/kg;
Oral, rat: LD50 = 3730 mg/kg;
Skin, rabbit: LD50 = 1970 mg/kg;
Skin, rat: LD50 = >3 gm/kg;

RTECS:
CAS# 577-11-7: Draize test, rabbit, eye: 250 ug Mild; 
Draize test, rabbit, eye: 1% Severe; 
Draize test, rabbit, skin: 10 mg/24H Moderate; 
Oral, mouse: LD50 = 2643 mg/kg; 
Oral, rat: LD50 = 1900 mg/kg; 

RTECS: 
CAS# 7732-18-5: Oral, rat: LD50 = >90 mL/kg; 

Other: The estimated acute oral (rat) LD50 and acute dermal (rabbit) LD50 values for this material are >5.0 g/kg and >10.0 g/kg, respectively. The 4-hour LC50 value is estimated to be >2,500 ppm. 
Ethyl alcohol - IARC: Group 1 carcinogen 
Acetone - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65. 
Carcinogenicity: 2-Ethylhexanol - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65. 
Dioctyl sodium sulfosuccinate - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65. 
Water - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65. 

Other: See actual entry in RTECS for complete information. 

Section 12 - Ecological Information 
Fish: Bluegill/Sunfish: 54.5 mg/L; 96 hr LC50 
Ecotoxicity: Fish: Rainbow trout: 35.4 mg/L; 96 hr LC50 
Water flea Daphnia: 35.9 mg/L; 48 hr LC50 

Section 13 - Disposal Considerations 
Dispose of in a manner consistent with federal, state, and local regulations. 

Section 14 - Transport Information 
US DOT 
Shipping Name: FLAMMABLE LIQUIDS, N.O.S. 
Hazard Class: 3 
UN Number: UN1993 
Packing Group: III 
Canada TDG 
Shipping Name: Not available 
Hazard Class: 
UN Number: 
Packing Group: 

USA RQ: CAS# 67-64-1: 5000 lb final RQ; 2270 kg final RQ 

Section 15 - Regulatory Information 

European/International Regulations 
European Labeling in Accordance with EC Directives 
Hazard Symbols: XI 
Risk Phrases: 
R 10 Flammable. 
R 36/38 Irritating to eyes and skin. 
Safety Phrases: 
S 16 Keep away from sources of ignition - No smoking. 
S 24/25 Avoid contact with skin and eyes. 

WGK (Water Danger/Protection) 
CAS# 64-17-5: 0 
CAS# 67-64-1: 0 
CAS# 104-76-7: 2 
CAS# 577-11-7: 2 
CAS# 7732-18-5: Not available
Canada
CAS# 64-17-5 is listed on Canada's DSL List
CAS# 67-64-1 is listed on Canada's DSL List
CAS# 104-76-7 is listed on Canada's DSL List
CAS# 577-11-7 is listed on Canada's DSL List
CAS# 7732-18-5 is listed on Canada's DSL List
Canadian WHMIS Classifications: B2, D2B
This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.
CAS# 64-17-5 is listed on Canada's Ingredient Disclosure List
CAS# 67-64-1 is listed on Canada's Ingredient Disclosure List
CAS# 104-76-7 is listed on Canada's Ingredient Disclosure List
CAS# 577-11-7 is listed on Canada's Ingredient Disclosure List
CAS# 7732-18-5 is not listed on Canada's Ingredient Disclosure List.

US Federal
TSCA
CAS# 64-17-5 is listed on the TSCA Inventory.
CAS# 67-64-1 is listed on the TSCA Inventory.
CAS# 104-76-7 is listed on the TSCA Inventory.
CAS# 577-11-7 is listed on the TSCA Inventory.
CAS# 7732-18-5 is listed on the TSCA Inventory.

Section 16 - Other Information
MSDS Creation Date: 2/02/1999
Revision #9 Date 7/20/2009

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantibility or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential, or exemplary damages howsoever arising, even if the company has been advised of the possibility of such damages.

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