1 - Product and Company Information

Product Name: DIOCTYL SULFOSUCCINATE SODIUM SIGMAULTRA
Product Number: D4422
Company: Sigma-Aldrich Pte Ltd
#02-14 The Capricorn, Sci. Park II
Singapore 117528
Singapore

Technical Phone #: (65) 6779 1200
Fax: (65) 6779 1822

2 - Hazards Identification

SPECIAL INDICATION OF HAZARDS TO HUMANS AND THE ENVIRONMENT
Harmful if swallowed. Irritating to skin. Risk of serious damage to eyes.

3 - Composition/Information on Ingredients

<table>
<thead>
<tr>
<th>Product Name</th>
<th>CAS #</th>
<th>EC no</th>
<th>Annex I Index Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIS(2-ETHYLHEXYL) SULFOSUCCINATE SODIUM SALT</td>
<td>577-11-7</td>
<td>209-406-4</td>
<td>None</td>
</tr>
</tbody>
</table>

Formula: C20H37O7S.Na
Molecular Weight: 444.55 AMU
Synonyms: Aerosol GPG * Aerosol OT * Aerosol OT 75 * Aerosol OT-B * Alcopol O * Alphason OT * Berol 478 * Bis(ethylhexyl) ester of sodium sulfosuccinic aci * Bis-2-ethylhexylester sulfojantaranu sodneho (Czech) * Bis(2-ethylhexyl)sodium sulfosuccinate * Bis(2-ethylhexyl) S-sodium sulfosuccinate * 1,4-Bis(2-ethylhexyl) sodium sulfosuccinate * Butanedioic acid, sulfo-, 1,4-bis(2-ethylhexyl) ester, sodium salt (9CI) * Celanol DOS 75 * Clestol * Colace * Complemix * Constoneate * Coprol * Defilin * Di-(2-ethylhexyl) sodium sulfosuccinate * Dioclytyn * Diocetylal * Dioctyl ester of sodium sulfosuccinate * Dioctyl ester of sodium sulfosuccinic acid * Dioctyl-medoforte * Dioctyl sodium sulfosuccinate * Dioctyl sulfosuccinate sodium * Diocetyl sulfosuccinate sodium salt * Diomedicone * Diosuccin * Diotilan * Diovac * Docusate sodium * Doxinate * Doxol * D-S-S * Dulsivac * Duosol * 2-Ethylhexyl sulfosuccinate sodium * Humifen WT 27G * Konlax * Kosate * Laxinate * Laxinate 100 * Manoxal OT * Manoxol OT * Mervamine * Modane soft * Molatoc

4 - First Aid Measures
AFTER INHALATION
  If inhaled, remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen.

AFTER SKIN CONTACT
  In case of contact, immediately wash skin with soap and copious amounts of water.

AFTER EYE CONTACT
  In case of contact, immediately flush eyes with copious amounts of water for at least 15 minutes.

AFTER INGESTION
  If swallowed, wash out mouth with water provided person is conscious. Call a physician.

5 - Fire Fighting Measures

EXTINGUISHING MEDIA
  Suitable: Water spray. Carbon dioxide, dry chemical powder, or appropriate foam.

SPECIAL RISKS
  Specific Hazard(s): Emits toxic fumes under fire conditions.

SPECIAL PROTECTIVE EQUIPMENT FOR FIREFIGHTERS
  Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

6 - Accidental Release Measures

PROCEDURE(S) OF PERSONAL PRECAUTION(S)
  Wear respirator, chemical safety goggles, rubber boots, and heavy rubber gloves.

METHODS FOR CLEANING UP
  Sweep up, place in a bag and hold for waste disposal. Avoid raising dust. Ventilate area and wash spill site after material pickup is complete.

7 - Handling and Storage

HANDLING
  Directions for Safe Handling: Do not breathe dust. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure.

STORAGE
  Conditions of Storage: Keep tightly closed.

8 - Exposure Controls / Personal Protection

ENGINEERING CONTROLS
  Safety shower and eye bath. Mechanical exhaust required.

GENERAL HYGIENE MEASURES
  Wash thoroughly after handling.

PERSONAL PROTECTIVE EQUIPMENT
  Respiratory Protection: Use respirators and components tested and approved under appropriate government standards such as NIOSH (US)
or CEN (EU). Where risk assessment shows air-purifying respirators are appropriate use a dust mask type N95 (US) or type P1 (EN 143) respirator.
Hand Protection: Compatible chemical-resistant gloves.
Eye Protection: Chemical safety goggles.

9 - Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
<th>At Temperature or Pressure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Physical State: Solid</td>
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</tr>
<tr>
<td>Color</td>
<td>White</td>
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</tr>
<tr>
<td>pH</td>
<td>N/A</td>
<td></td>
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<tr>
<td>BP/BP Range</td>
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</tr>
<tr>
<td>MP/MP Range</td>
<td>173.0 - 179.0 °C</td>
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<tr>
<td>Flash Point</td>
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<tr>
<td>Flammability</td>
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<tr>
<td>Autoignition Temp</td>
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<tr>
<td>Oxidizing Properties</td>
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<tr>
<td>Explosive Properties</td>
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<tr>
<td>Explosion Limits</td>
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<tr>
<td>Vapor Pressure</td>
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<td></td>
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<tr>
<td>Partition Coefficient</td>
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<tr>
<td>Viscosity</td>
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<tr>
<td>Vapor Density</td>
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<tr>
<td>Saturated Vapor Conc.</td>
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<tr>
<td>Evaporation Rate</td>
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<tr>
<td>Bulk Density</td>
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<tr>
<td>Decomposition Temp.</td>
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<tr>
<td>Solvent Content</td>
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<tr>
<td>Water Content</td>
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<tr>
<td>Surface Tension</td>
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<tr>
<td>Conductivity</td>
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<td></td>
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<tr>
<td>Miscellaneous Data</td>
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</tr>
<tr>
<td>Solubility</td>
<td>Solvent: 10 mg/ml MeOH</td>
<td></td>
</tr>
</tbody>
</table>

10 - Stability and Reactivity

STABILITY
Stable: Stable.
Materials to Avoid: Strong oxidizing agents.

HAZARDOUS DECOMPOSITION PRODUCTS
Hazardous Decomposition Products: Carbon monoxide, Carbon dioxide, Sulfur oxides.

HAZARDOUS POLYMERIZATION
Hazardous Polymerization: Will not occur

11 - Toxicological Information

RTECS NUMBER: WN0525000

ACUTE TOXICITY

LD50
Oral Rat
1900 mg/kg

LD50
Intraperitoneal
Rat
590 MG/KG

LD50
Oral
Mouse
2643 mg/kg

LD50
Intravenous
Mouse
60 MG/KG

IRRITATION DATA
Dog Rat
Remarks: No irritation effect

Skin
Rabbit
10 mg
24 H
Remarks: Moderate irritation effect

Eyes
Rabbit
0.25 mg
Remarks: Mild irritation effect

Eyes
Rabbit
1 %
Remarks: Severe irritation effect

SIGNS AND SYMPTOMS OF EXPOSURE
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

ROUTE OF EXPOSURE
Skin Contact: Causes skin irritation.
Skin Absorption: May be harmful if absorbed through the skin.
Eye Contact: Causes severe eye irritation.
Inhalation: Material may be irritating to mucous membranes and upper respiratory tract. May be harmful if inhaled.
Ingestion: Harmful if swallowed.

TARGET ORGAN INFORMATION
Large intestine. Small intestine.

CHRONIC EXPOSURE - REPRODUCTIVE HAZARD
Species: Rat
Dose: 8820 MG/KG
Route of Application: Oral
Exposure Time: (MULTIGENERATION)
Result: Effects on Newborn: Other postnatal measures or effects.

12 - Ecological Information
N/A
ECOTOXICOLOGICAL EFFECTS
Test Type: LC50 Fish
Species: Onchorhynchus mykiss (Rainbow trout)
Time: 96 h
Value: 28 mg/l

13 - Disposal Considerations

SUBSTANCE DISPOSAL
Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state, and local environmental regulations.

14 - Transport Information

RID/ADR
Non-hazardous for road transport.

IMDG
Non-hazardous for sea transport.

IATA
Non-hazardous for air transport.

15 - Regulatory Information

CLASSIFICATION AND LABELING ACCORDING TO EU DIRECTIVES
INDICATION OF DANGER: Xn
Harmful.
R-PHRASES: 22-38-41
Harmful if swallowed. Irritating to skin. Risk of serious damage to eyes.
S-PHRASES: 26-39
In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear eye/face protection.

COUNTRY SPECIFIC INFORMATION

Germany
WGK: 2
ID-Number: 667
KBwS-Decision

16 - Other Information

WARRANTY
The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Inc., shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. Copyright 2007 Sigma-Aldrich Co. License granted to make unlimited paper copies for internal use only.

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