

# Material Safety Data Sheet

Revision Date: 02/06/12



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## I. PRODUCT IDENTIFICATION

**Catalog Number / Product Name:** 32467 / Endosulfan Sulfate Standard  
**Revision Number:** 1  
**Intended use:** For Laboratory use only

## II. HAZARD IDENTIFICATION

### Emergency Overview:

**Physical Hazards:** F - Highly flammable  
**Health Hazards:** Xi - Irritant

**Routes of Entry:** Inhalation, Skin Contact, Eye Contact, Ingestion  
**Target Organs Potentially Affected By Exposure:** eyes, CNS, respiratory system, skin  
**Chemical Interactions That Change Toxicity:** None Known  
**Medical Conditions Aggravated By Exposure:** Respiratory disease including asthma and bronchitis

### Immediate (Acute) Health Effects by Route of Exposure:

**Inhalation Irritation:** Can cause minor respiratory irritation, dizziness, weakness, fatigue, nausea, and headache.  
**Skin Contact:** Can cause minor skin irritation, defatting, and dermatitis.  
**Eye Contact:** Can cause minor irritation, tearing and reddening.  
**Ingestion Irritation:** May be harmful if swallowed.  
**Ingestion Toxicity:** Harmful if swallowed. May cause systemic poisoning.

### Long-Term (Chronic) Health Effects:

**Carcinogenicity:** No data.  
**Reproductive and Developmental Toxicity:** No data available to indicate product or any components present at greater than 0.1% may cause birth defects.  
**Inhalation:** Upon prolonged and/or repeated exposure, can cause minor respiratory irritation, dizziness, weakness, fatigue, nausea, and headache.  
**Skin Contact:** Upon prolonged or repeated contact, can cause minor skin irritation, defatting, and dermatitis.

## III. COMPOSITION / INFORMATION ON INGREDIENTS

| Chemical Name      | CAS #     | EINEC #   | % Composition |
|--------------------|-----------|-----------|---------------|
| Acetone            | 67-64-1   | 200-662-2 | 99.900000     |
| endosulfan sulfate | 1031-07-8 |           | 0.100000      |

## IV. FIRST-AID MEASURES

**Inhalation:** Remove to fresh air. If breathing is difficult, have a trained individual administer oxygen. If not breathing, give artificial respiration and have a trained individual administer oxygen. Get

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**Eyes:** medical attention immediately  
Flush eyes with plenty of water for at least 20 minutes retracting eyelids often. Tilt the head to prevent chemical from transferring to the uncontaminated eye. Get immediate medical attention.

**Skin Contact:** Wash with soap and water. Remove contaminated clothing and launder. Get medical attention if irritation develops or persists.

**Ingestion:** Do not induce vomiting and seek medical attention immediately. Drink two glasses of water or milk to dilute. Provide medical care provider with this MSDS.

## V. FIRE FIGHTING MEASURES

**Extinguishing Media:** Use alcohol resistant foam, carbon dioxide, or dry chemical extinguishing agents. Water spray or fog may also be effective for extinguishing if swept across the base of the fire. Water can also be used to absorb heat and keep exposed material from being damaged by fire. Flammable component(s) of this material may be lighter than water and burn while floating on the surface.

**Fire and/or Explosion Hazards:** Vapors may be ignited by heat, sparks, flames or other sources of ignition at or above the low flash point giving rise to a Class B fire. Vapors are heavier than air and may travel to a source of ignition and flash back

**Fire Fighting Methods and Protection:** Do not enter fire area without proper protection including self-contained toxic breathing apparatus and full protective equipment. Fight fire from a safe distance and a protected location due to the potential of hazardous vapors and decomposition products. Flammable component(s) of this material may be lighter than water and burn while floating on the surface. Use water spray/fog for cooling.

**Hazardous Combustion Products:** Carbon dioxide, Carbon monoxide

## VI. ACCIDENTAL RELEASE MEASURES

**Personal Precautions and Equipment:** Exposure to the spilled material may be irritating or harmful. Follow personal protective equipment recommendations found in Section VIII of this MSDS. Additional precautions may be necessary based on special circumstances created by the spill including; the material spilled, the quantity of the spill, the area in which the spill occurred. Also consider the expertise of employees in the area responding to the spill.

**Methods for Clean-up:** Prevent the spread of any spill to minimize harm to human health and the environment if safe to do so. Wear complete and proper personal protective equipment following the recommendation of Section VIII at a minimum. Dike with suitable absorbent material like granulated clay. Gather and store in a sealed container pending a waste disposal evaluation.

## VII. HANDLING AND STORAGE

**Handling Technical Measures and Precautions:** Harmful or irritating material. Avoid contacting and avoid breathing the material. Use only in a well ventilated area. Use spark-proof tools and explosion-proof equipment

**Storage Technical Measures and Conditions:** Store in a cool dry ventilated location. Isolate from incompatible materials and conditions. Keep container(s) closed. Keep away from sources of ignition

## VIII. EXPOSURE CONTROLS / PERSONAL PROTECTION

### United States:

| Chemical Name      | CAS No.   | IDLH                    | ACGIH STEL                  | ACGIH TLV-TWA                           | OSHA Exposure Limit                      |
|--------------------|-----------|-------------------------|-----------------------------|---|--|
| Acetone            | 67-64-1   | 2500 ppm IDLH (10% LEL) | 750 ppm STEL;               | 500 ppm TWA; 1188 mg/m <sup>3</sup> TWA | 1000 ppm TWA; 2400 mg/m <sup>3</sup> TWA |
| endosulfan sulfate | 1031-07-8 | ND                      | 1782 mg/m <sup>3</sup> STEL | No TLV                                  | No PEL established                       |

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## United Kingdom:

| Chemical Name      | CAS No.   | EINEC No. | WEL-STEL                          | WEL-TWA                        |
|--------------------|-----------|-----------|-----------------------------------|--------------------------------|
| Acetone            | 67-64-1   | 200-662-2 | 1500 ppm STEL;<br>3620 mg/m3 STEL | 500 ppm TWA; 1210 mg/m3<br>TWA |
| endosulfan sulfate | 1031-07-8 |           | No data.                          | No data.                       |

## France:

| Chemical Name      | CAS No.   | EINEC No. | VLCTs-STEL   | VME-TWA                        |
|--------------------|-----------|-----------|--|--------------------------------|
| Acetone            | 67-64-1   | 200-662-2 | 1000 ppm STEL<br>[VLCT] (restrictive<br>limit); 2420 mg/m3<br>STEL [VLCT]<br>(restrictive limit) | 500 ppm VME; 1210 mg/m3<br>VME |
| endosulfan sulfate | 1031-07-8 |           | No data.   | No data.                       |

## Germany:

| Chemical Name      | CAS No.   | EINEC No. | VELs   |
|--------------------|-----------|-----------|--|
| Acetone            | 67-64-1   | 200-662-2 | 500 ppm TWA AGW (exposure factor 2); 1200<br>mg/m3 TWA AGW (exposure factor 2) |
| endosulfan sulfate | 1031-07-8 |           | No data.   |

## Personal Protection:

|                                |  |
|--------------------------------|--|
| <b>Engineering Measures:</b>   | Local exhaust ventilation is recommended when generating excessive levels of vapors from handling or thermal processing.   |
| <b>Respiratory Protection:</b> | No respiratory protection required under normal conditions of use. Provide general room exhaust ventilation if symptoms of overexposure occur as explained Section III. A respirator is not normally required.                                       |
| <b>Eye Protection:</b>         | Wear chemically resistant safety glasses with side shields when handling this product. Do not wear contact lenses.   |
| <b>Skin Protection:</b>        | Wear protective gloves. Inspect gloves for chemical break-through and replace at regular intervals. Clean protective equipment regularly. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving work |

## IX. PHYSICAL AND CHEMICAL PROPERTIES

|                                  |                                |
|----------------------------------|--------------------------------|
| <b>Appearance, color:</b>        | Depends upon product selection |
| <b>Odor:</b>                     | Strong                         |
| <b>pH:</b>                       | No data available.             |
| <b>Vapor Density:</b>            | 2.0 (air = 1)                  |
| <b>Melting Point:</b>            | -95.4 °C Melting Point         |
| <b>Flash Point:</b>              | No data available.             |
| <b>Flammability:</b>             | Highly Flammable               |
| <b>Autoignition Temperature:</b> | 465 deg C                      |
| <b>Specific Gravity:</b>         | 0.7845 g/cm3 at 25 °C          |
| <b>Evaporation Rate:</b>         | No data available.             |
| <b>Odor Threshold:</b>           | No data available.             |
| <b>Solubility:</b>               | Complete; 100%                 |
| <b>VOC % by weight:</b>          | No data available.             |
| <b>Molecular Weight:</b>         | No data available.             |

## X. STABILITY AND REACTIVITY:

|   |                                      |
|---|--------------------------------------|
| <b>Stability:</b>                                     | Stable under normal conditions.      |
| <b>Materials to Avoid / Chemical Incompatibility:</b> | Strong oxidizing agents Strong acids |
| <b>Hazardous Decomposition Products:</b>              | Carbon dioxide Carbon monoxide       |

## XI. TOXICOLOGICAL INFORMATION:

### Component Toxicological Data:

#### NIOSH:

| Chemical Name                       | CAS No. | LD50/LC50 |
|-------------------------------------|---------|-----------|
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Acetone 67-64-1 Oral LD50 Rat 5800 mg/kg

## Component Carcinogenic Data:

### OSHA:

Chemical Name CAS No.  
No data available

### ACGIH:

Chemical Name CAS No. A4 - Not Classifiable as a Human Carcinogen  
Acetone 67-64-1

### NIOSH:

Chemical Name CAS No.  
No data available.

### NTP:

Chemical Name CAS No.  
No data available.

### IARC:

| Chemical Name | CAS No. | Group No. |
|---------------|---------|-----------|
| No data.      |         | Group 1   |
| No data.      |         | Group 2A  |
| No data.      |         | Group 2B  |

## XII. ECOLOGICAL INFORMATION:

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|                           |                                     |
|---------------------------|-------------------------------------|
| Overview:                 | No ecological information available |
| Mobility:                 | No data                             |
| Persistence:              | No data                             |
| Bioaccumulation:          | No data                             |
| Degradability:            | No data                             |
| Ecological Toxicity Data: | 0                                   |

## XIII. DISPOSAL CONSIDERATIONS:

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|                                     |  |
|-------------------------------------|--|
| Waste Description of Spent Product: | Spent or discarded material is a hazardous waste.                                      |
| Disposal Methods:                   | Dispose of by incineration following Federal, State, Local, or Provincial regulations. |
| Waste Disposal of Packaging:        | Comply with all Local, State, Federal, and Provincial Environmental Regulations.       |

## XIV. TRANSPORTATION INFORMATION:

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|                           |         |
|---------------------------|---------|
| United States:            |         |
| DOT Proper Shipping Name: | Acetone |
| UN Number:                | UN1090  |
| Hazard Class:             | 3       |
| Packing Group:            | II      |

|                            |         |
|----------------------------|---------|
| International:             |         |
| IATA Proper Shipping Name: | Acetone |
| UN Number:                 | UN1090  |
| Hazard Class:              | 3       |
| Packing Group:             | II      |

|                   |     |
|-------------------|-----|
| Marine Pollutant: | Yes |
|-------------------|-----|

## XV. REGULATORY INFORMATION:

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### United States:

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| Chemical Name      | CAS#      | CERCLA | SARA 313 | SARA EHS 313 | TSCA |
|--------------------|-----------|--------|----------|--------------|------|
| Acetone            | 67-64-1   | X      | -        | -            | X    |
| endosulfan sulfate | 1031-07-8 | X      | -        | -            | -    |

## The following chemicals are listed on CA Prop 65:

| Chemical Name | CAS # | Regulation |
|---------------|-------|------------|
|---------------|-------|------------|

## State Right To Know Listing:

| Chemical Name      | CAS#      | New Jersey | Massachusetts | Pennsylvania | California |
|--------------------|-----------|------------|---------------|--------------|------------|
| Acetone            | 67-64-1   | X          | X             | X            | X          |
| endosulfan sulfate | 1031-07-8 | X          | X             | X            | X          |

## EU Directives Classification:

### Hazard Symbols



**Risk Phrases:** R36 - Irritating to eyes  
R11 - Highly flammable

**Safety Phrases:** S16:Keep away from sources of ignition - No smoking  
S36/37/39:Wear suitable protective clothing, gloves and eye/face protection

## XVI: ADDITIONAL INFORMATION

**Prior Version Date:** None

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