Section 1 - Product and Company Information

Product Name 5-5-DIMETHYL-1-3-CYCLOHEXANEDIONE CRYSTALLINE
Product Number D3504
Brand SIGMA

Company Sigma-Aldrich
Address 3050 Spruce Street
SAINT LOUIS MO 63103 US
Technical Phone: 800-325-5832
Fax: 800-325-5052
Emergency Phone: 314-776-6555

Section 2 - Composition/Information on Ingredient

Substance Name 5,5-DIMETHYL-1,3-CYCLOHEXANEDIONE CAS # 126-81-8 SARA 313

Formula C8H12O2
Synonyms Cyclomethone * Dimedon * Dimedone *
5,5-Dimethyl-1,3-cyclohexanedione *
5,5-Dimethylidihydroresorcinol *
5,5-Dimethylhydroresorcinol * LU 274 * Medon *
Methon * Methone
RTECS Number: GV0345000

Section 3 - Hazards Identification

HMIS RATING
HEALTH: 0
FLAMMABILITY: 0
REACTIVITY: 1

NFPA RATING
HEALTH: 0
FLAMMABILITY: 0
REACTIVITY: 1

For additional information on toxicity, please refer to Section 11.

Section 4 - First Aid Measures

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

INHALATION EXPOSURE
If inhaled, remove to fresh air. If breathing becomes difficult, call a physician.

DERMAL EXPOSURE
In case of contact, immediately wash skin with soap and copious amounts of water.

**EYE EXPOSURE**

In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

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**Section 5 - Fire Fighting Measures**

**FLASH POINT**
N/A

**AUTOIGNITION TEMP**
N/A

**FLAMMABILITY**
N/A

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

**FIREFIGHTING**
Proper protective equipment: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes. Specific hazard(s): Emits toxic fumes under fire conditions.

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**Section 6 - Accidental Release Measures**

**PROCEDURE(S) OF PERSONAL PRECAUTION(S)**
Exercise appropriate precautions to minimize direct contact with skin or eyes and prevent inhalation of dust.

**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.

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**Section 7 - Handling and Storage**

**HANDLING**
User exposure: Avoid inhalation. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure.

**STORAGE**
Suitable: Keep tightly closed.
Store at 2-8°C

**SPECIAL REQUIREMENTS**
Heat and light sensitive.

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**Section 8 - Exposure Controls / PPE**

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

**PERSONAL PROTECTIVE EQUIPMENT**
Respiratory: Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or
type P1 (EN 143) dust masks.
Hand: Protective gloves.
Eye: Chemical safety goggles.

GENERAL HYGIENE MEASURES
Wash thoroughly after handling.

Section 9 - Physical/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>
<td></td>
</tr>
<tr>
<td>Color</td>
<td>Faintly yellow</td>
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</tr>
<tr>
<td>Form</td>
<td>Fine crystals</td>
<td></td>
</tr>
<tr>
<td>Molecular Weight</td>
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<tr>
<td>pH</td>
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<tr>
<td>MP/MP Range</td>
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<td>Freezing Point</td>
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<tr>
<td>Vapor Pressure</td>
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<tr>
<td>Solubility</td>
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</table>

N/A = not available

Section 10 - Stability and Reactivity

STABILITY
Stable: Stable.
Conditions to Avoid: Heat. Light.
Materials to Avoid: Strong oxidizing agents.

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

HAZARDOUS POLYMERIZATION
Hazardous Polymerization: Will not occur

Section 11 - Toxicological Information

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

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

TOXICITY DATA
Oral
   Rat
   > 5,000 mg/kg
   LD50

Section 12 - Ecological Information
No data available.

Section 13 - Disposal Considerations
APPROPRIATE METHOD OF DISPOSAL OF SUBSTANCE OR PREPARATION
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.

Section 14 - Transport Information
DOT
   Proper Shipping Name: None
   Non-Hazardous for Transport: This substance is considered to be non-hazardous for transport.

IATA
   Non-Hazardous for Air Transport: Non-hazardous for air transport.

Section 15 - Regulatory Information
UNITED STATES REGULATORY INFORMATION
   SARA LISTED: No
   TSCA INVENTORY ITEM: Yes

CANADA REGULATORY INFORMATION
   WHMIS Classification: This product has been classified in accordance with the hazard criteria of the CPR, and the MSDS contains all the information required by the CPR.
   DSL: Yes
   NDSL: No

Section 16 - Other Information
DISCLAIMER
   For R&D use only. Not for drug, household or other uses.

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