

SAFETY DATA SHEET

Section 1 - Identification of Substance or Mixture and Company

Product identify:

Product name: 5,5-Dimethyl-1,3-cyclohexanedione

Synonyms: Dimedone

Catalog number: PI-15341

Relevant identified uses of the substance or mixture and uses advised against

Identified uses: Laboratory chemicals, Manufacture of substances

Details of the supplier of the safety data sheet

Company identification: PI Chemicals Ltd.
633 Eshan Road,
Pudong New Area, Shanghai China, 201203

Telephone number: +86-21-58953700

Fax number: +86-21-58953701

E-mail address: info@pipharm.com

Emergency telephone number

Emergency number: +86-21-58953706

Section 2 - Hazards Identification

Classification of the substance or mixture:

Regulation (EC) No 1272/2008

Not hazardous

Label elements

Classification according to (EC) No 1272/2008

Signal word: Xi Irritant, Xn Harmful

Hazard statement(s):

No data available

Precautionary statement(s)

No data available

Accroding to EU Directive 67/548/EEC or 1999/45/EC.

Symbol(s): No symbol

Risk phrases:

No data available

Safety phrases:

S 24/25: Avoid contact with skin and eyes.

HMS classification:

Health hazard: 0

Chronic health hazard: *

Flammability: 0

Physical hazards : 0

NFPA rating:

Health hazard: 0

Fire: 0

Reactivity hazard: 0

Section 3: Composition & Information on Ingredients

Molecular formula: C₈H₁₂O₂

Molecular weight: 140.18

| <i>Component</i> | <i>Concentration</i> |
|-----------------------------|----------------------|
| <i>CAS Number:</i> 126-81-8 | |
| <i>EC Number:</i> 204-804-4 | |

Section 4 - First Aid Measures

Eye: Flush eyes with plenty of water for at least 15 minutes. Get medical aid if symptoms appear.

Skin: Wash skin with plenty of water at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops and persists.

Ingestion: Wash mouth out with water. Get medical aid immediately.

Inhalation: Remove from exposure and move to fresh air immediately. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical aid.

Section 5 – Fire-Fighting Measures

Extinguishing media: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special hazards arising from the substance or mixture: Carbon oxides

Advice for firefighters: Wear a self-contained breathing apparatus for fire fighting if necessary

Section 6 - Accidental Release Measures

Personal precautions, protective equipment and emergency procedures:

Use proper personal protective equipment as indicated in Section 8.

Environmental precautions: Prevent further spillage or leakage when safe and capable

Methods and materials for containment and cleaning up:

Vacuum or sweep up material and keep in a suitable closed container for disposal. Do not flush with water.

Section 7 - Handling and Storage

Precautions for safe handling:

Provide appropriate exhaust ventilation at places where dust is formed. Avoid contact with skin, eyes and clothes. Avoid inhalation of vapors and spray mist.

Conditions for safe storage, including any incompatibilities:

Store in a dry, well-ventilated place. Keep tightly closed.

Light sensitive. Heat sensitive.

Section 8 - Exposure Controls/Personal Protection

Control parameters:

Contains no materials with occupational exposure limits.

Exposure controls:

Ensure well ventilation, good industrial hygiene and safety practice.

Personal protective equipment

Eye/Face protection:

Wear appropriate protective eyeglasses under the standards such as EN166(EU) or type ABEK(EN14387).

Skin/Body protection:

Wear appropriate protective gloves which have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN374 derived from it to prevent skin exposure. Dispose of contaminated gloves in accordance with applicable laws. Wash and dry hands.

Wear appropriate protective clothing to prevent skin exposure.

Respiratory protection:

Use an approved respirator and components under appropriate government standards such as NIOSH(US) or CEN(EU) if exposure limits are exceeded or if irritation or other symptoms are experienced.

Section 9- Physical and Chemical Properties

Physical state:

Crystalline

Color:

White or almost white

Odour:

Odorless

Melting point/freezing point:

146-148 °C(lit.)

Initial boiling point and boiling range:

164 - 166 °C at 760mmHg

Flash point:

No data available

| | |
|--|---------------------------|
| <i>Evaporation rate:</i> | No data available |
| <i>Flammability(solid, gas):</i> | No data available |
| <i>Upper/lower flammability or explosive limits:</i> | No data available |
| <i>Vapour pressure:</i> | No data available |
| <i>Vapour density:</i> | No data available |
| <i>Relative density:</i> | No data available |
| <i>Solubility:</i> | Soluble in water slightly |
| <i>Partition coefficient: n-octanol/water:</i> | No data available |
| <i>Auto-ignition temperature:</i> | No data available |
| <i>Decomposition temperature:</i> | No data available |
| <i>Viscosity:</i> | No data available |

Section 10-Stability and Reactivity

| | |
|--|--|
| <i>Reactivity:</i> | No data available |
| <i>Chemical stability:</i> | Stable under recommended temperatures and pressures. |
| <i>Possibility of hazardous reactions:</i> | No data available |
| <i>Conditions to avoid:</i> | Avoid heat. Avoid light. |
| <i>Incompatible materials:</i> | Strong oxidizing agents |
| <i>Hazard Decomposition products:</i> | Carbon oxides |

Section 11 - Toxicological Information

| | |
|---|-------------------------------|
| <i>Acute toxicity:</i> | |
| Component: 5,5-Dimethyl-1,3-cyclohexanedione | |
| LD50 Oral - rat - > 5,000 mg/kg. LD50 Subcutaneous - rat - | No data available |
| <i>Skin corrosion/irritation:</i> | No data available |
| <i>Serious eye damage/eye irritation:</i> | No data available |
| <i>Respiratory or skin sensitization:</i> | May cause allergic reactions. |
| <i>Germ cell mutagenicity:</i> | No data available |
| <i>Carcinogenicity:</i> | |
| Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65. | |
| <i>Reproductive toxicity:</i> | No data available |
| <i>Specific target organ toxicity(STOT)-single exposure:</i> | No data available |
| <i>Specific target organ toxicity (STOT)-repeated exposure:</i> | No data available |
| <i>Aspiration hazard:</i> | No data available |
| <i>Additional information:</i> | RTECS#: GV0345000 |

Section 12 – Ecological Information

| | |
|--|--|
| <i>Toxicity:</i> | |
| Component: 5,5-Dimethyl-1,3-cyclohexanedione | |

Toxicity to fish LC50 - Pimephales promelas (fathead minnow) - 11,500 mg/l - 96 h

Persistence and degradability: No data available

Bioaccumulative potential: No data available

Component: 5,5-Dimethyl-1,3-cyclohexanedione

Mobility in soil: No data available

Results of PBT and vPvB assessment: No data available

Other adverse effects: No data available

Section 13 - Disposal Consideration

Waste treatment methods

Product: Dispose of in accordance with federal, state and local environmental regulations

Contaminated packaging: Dispose of as unused product

Section 14 - Transport Information

IATA

Not dangerous goods

IMDG

Not dangerous goods

RID/ADR

Not dangerous goods

DOT(US)

Not dangerous goods

Section 15 - Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture

No data available

Chemical safety assessment: No data available

Section 16 – Other Information

SDS creation date: May 06, 2013

Update: May 16, 2013

Disclaimer:

The above information is believed to be accurate and represents the best knowledge available to us currently. However, we make no warranty of merchantability 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 way shall PI Chemicals, 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, even if PI Chemicals has been advised of the possibility of such damages.