MATERIAL SAFETY DATA SHEET

1. CHEMICAL PRODUCT

Product Name: 3-Methyl-1-Phenyl 5-Pyrazolone

Synonyms:
1-Phenyl-3-Methyl-5-Oxo-2-Pyrazoline; 1-Phenyl-3-Methyl-5-Pyrazalone; 2,4-Dihydro-5-Methyl-2-Phenyl-3h-Pyrazol-3-One; 3-Methyl-1-Phenyl-2-Pyrazoline-5-One; 3-Methyl-1-Phenyl-5-Pyrazolene; 5-Methyl-2-Phenyl-2,4-Dihydro-3h-Pyrazol-3-One; 5-Methyl-2-Phenyl-2,4-Dihydro-Pyrazol-3-One

CAS No.: 89-25-8
Molecular Weight: 174.2
Chemical Formula: C_{10}H_{10}N_{2}O

2. COMPOSITION, INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>CAS No</th>
<th>Percent</th>
<th>Hazardous</th>
</tr>
</thead>
<tbody>
<tr>
<td>3-Methyl-1-phenyl 5-pyrazolone</td>
<td>89-25-8</td>
<td>98-100%</td>
<td>Yes</td>
</tr>
</tbody>
</table>

3. HAZARDOUS IDENTIFICATION

Risk advice to man and the environment
Irritating to eyes, respiratory system and skin.

4. FIRST AID MEASURES

General advice:
Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled:
If breathed in, move person into fresh air. If not breathing give artificial respiration Consult a physician.
In case of skin contact:
Wash off with soap and plenty of water. Consult a physician.

In case of eye contact:
Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed:
Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

5. FIRE FIGHTING MEASURES

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

Special protective equipment for fire-fighters:
Wear self-contained breathing apparatus for fire fighting if necessary.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions:
Use personal protective equipment. Avoid dust formation. Avoid breathing dust. Ensure adequate ventilation.

Environmental precautions: Do not let product enter drains.

Methods for cleaning up:
Pick up and arrange disposal without creating dust. Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

Handling:
Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

Storage: Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

8. EXPOSURE CONTROLS, PERSONAL PROTECTION
Personal protective equipment:

Respiratory protection:
Where risk assessment shows air-purifying respirators are appropriate use a dust mask type N95 (US) or type P1 (EN 143) respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand protection:
The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it. Handle with gloves.

Eye protection: Safety glasses

Skin and body protection:
Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Hygiene measures:
Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Form crystalline Colour light yellow</td>
</tr>
<tr>
<td>Safety data</td>
<td></td>
</tr>
<tr>
<td>pH</td>
<td>no data available</td>
</tr>
<tr>
<td>Melting point</td>
<td>126 - 128 °C</td>
</tr>
<tr>
<td>Boiling point</td>
<td>287 °C at 353 hPa</td>
</tr>
<tr>
<td>Flash point</td>
<td>no data available</td>
</tr>
<tr>
<td>Ignition temperature</td>
<td>no data available</td>
</tr>
<tr>
<td>Lower explosion limit</td>
<td>no data available</td>
</tr>
<tr>
<td>Upper explosion limit</td>
<td>no data available</td>
</tr>
<tr>
<td>Water solubility</td>
<td>no data available</td>
</tr>
</tbody>
</table>
10. STABILITY AND REACTIVITY

**Storage stability:** Stable under recommended storage conditions.

**Materials to avoid:** Strong oxidizing agents

**Hazardous decomposition products:**
Hazardous decomposition products formed under fire conditions. - Carbon oxides, nitrogen oxides (NOx)

11. TOXICOLOGICAL INFORMATION

**Acute toxicity**
LD50 Oral - rat - 1.915 mg/kg
Remarks: Sense Organs and Special Senses (Nose, Eye, Ear, and Taste): Eye: Lacrimation. Lungs, Thorax, or

**Respiration:** Acute pulmonary edema. Liver: Other changes.

**Irritation and corrosion:** no data available

**Sensitisation:** no data available

**Chronic exposure:**
IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

**Signs and Symptoms of Exposure:**
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

**Potential Health Effects**

**Inhalation:** May be harmful if inhaled. Causes respiratory tract irritation.

**Skin:** May be harmful if absorbed through skin. Causes skin irritation.

**Eyes:** Causes eye irritation.

**Ingestion:** May be harmful if swallowed.

**Additional Information:** RTECS: UQ9625000
12. ECOLOGICAL INFORMATION

Elimination information (persistence and degradability): no data available

Ecotoxicity effects: no data available

Further information on ecology: no data available

13. DISPOSAL CONSIDERATIONS

Product:
Observe all federal, state, and local environmental regulations. 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.

Contaminated packaging: Dispose of as unused product.

14. TRANSPORT INFORMATION

UN number:
ADR/RID: -  IMDG: -  IATA: -

UN proper shipping name
ADR/RID: Not dangerous goods
IMDG: Not dangerous goods
IATA: Not dangerous goods

Transport hazard class(es)
ADR/RID: -  IMDG: -  IATA: -

Packaging group
ADR/RID: -  IMDG: -  IATA: -

Environmental hazards
ADR/RID: no  IMDG Marine pollutant: no  IATA: no

Special precautions for user
No data available
15. REGULATORY INFORMATION

**Labelling according to EC Directives**

- Hazard symbols: Xi Irritant
- **R-phrase(s)**: R36/37/38 Irritating to eyes, respiratory system and skin.
- **S-phrase(s)**: S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- S36 Wear suitable protective clothing.

16. ADDITIONAL INFORMATION

The information above is believed to be accurate and represents the best information currently available to us. 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 event shall Jay Organics 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 Jay Organics has been advised of the possibility of such damages.