Section 1. Product and Company Identification

Product Name: Paeonol
Product ID: P0219
Chemical Name (Synonyms): 4-O-Methylresacetophenone, Resacetophenone-4-methyl ether
Supplier: LKT Laboratories, Inc
545 Phalen Blvd.
St. Paul, MN 55130 USA
Ph: 651-644-8424 Fax: 651-644-8357
www.lktlabs.com - getinfo@lktlabs.com

Section 2. Hazards Identification

GHS Classification:
- Acute toxicity, Oral (Category 4) H302
- Acute toxicity, Skin (Category 4) H312
- Acute toxicity, Inhalation (Category 4) H332
- Skin irritation (Category 2) H315
- Eye irritation (Category 2A) H319
- Specific target organ toxicity - single exposure (Category 3) Respiratory system H335
- Acute aquatic toxicity (Category 3) H402
- Chronic aquatic toxicity (Category 3) H412

GHS Label elements including precautionary statements

Pictogram: Warning

Signal word: Hazard statements
H302 + H312 + H332 - Harmful if swallowed, in contact with skin or if inhaled.
H315 - Causes skin irritation.
H319 - Causes serious eye irritation.
H335 - May cause respiratory irritation.
H412 - Harmful to aquatic life with long lasting effects.

Precautionary statements:
P261 - Avoid breathing dust, fumes, gas, mist, vapors, spray.
P264 - Wash skin thoroughly after handling.
P270 - Do not eat, drink or smoke when using this product.
P271 - Use only outdoors or in a well-ventilated area.
P273 - Avoid release to the environment.
P280 - Wear protective gloves, eye protection, face protections.
P301 + P312 - IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
P302 + P352 - IF ON SKIN: Wash with plenty of soap and water.
P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P312 - Call a POISON CENTER/doctor if you feel unwell.
P330 - Rinse mouth.
P332 + P313 - IF SKIN IRRITATION OCCURS: Get medical advice.
P337 + P313 - If eye irritation persists: Get medical advice.
P362 - Take off contaminated clothing and wash before reuse.
P403 + P233 - Store in a well-ventilated place. Keep container tightly closed.
P405 - Store locked up.
P501 - Dispose of contents/container to an approved waste disposal plant.

HMIS Classification:
- Health hazard: 2
- Chronic health hazard: *
- Flammability: 1
- Physical hazard: 0

NFPA Rating:
- Health hazard: 2
- Fire hazard: 1
- Reactivity hazard: 0

Potential Health Effects:
- Inhalation - Acute toxicity. Harmful if inhaled.
- Skin - Acute toxicity. Harmful if absorbed through skin. Causes skin irritation.
- Eyes - May cause eye irritation.
Section 3. Composition/Information on Ingredients

<table>
<thead>
<tr>
<th>Substances</th>
<th>Ingredient: Title Compound</th>
<th>Percent: 100</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formula</td>
<td>C₉H₁₀O₃</td>
<td>Formula Wt.</td>
</tr>
<tr>
<td>CAS No.</td>
<td>552-41-0</td>
<td>EC No.</td>
</tr>
</tbody>
</table>

Section 4. First Aid Measures

General advice
Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

Eye Contact
Flush eyes with plenty of water for at least 15 minutes and consult a physician.

Skin Contact
Wash off with soap and plenty of water. Consult a physician.

Inhalation
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

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

Section 5. Firefighting Measures

Flash Point
114˚C

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

Firefighting Procedures
Wear self-contained breathing apparatus for firefighting if necessary.

Unusual Fire Hazards
Not available.

Section 6. Accidental Release Measures

Personal Precautions
Use personal protective equipment. Avoid dust formation. Avoid breathing dust, vapors, mist, or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

Environmental Precautions
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

Methods and materials for containment and cleanup
Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

Section 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 Conditions
Keep container tightly closed in a dry and well-ventilated place. Recommended storage temperature: Ambient

Hazardous Decomposition Products
Hazardous decomposition products formed under fire conditions. - Carbon oxides.

Other Remarks
Ingestion - Acute toxicity. Harmful if swallowed.
Section 8. Exposure Controls/Personal Protection

**Personal protective equipment**

EXPOSURE CONTROLS
Contains no substances with occupational exposure limit values. Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

PERSONAL PROTECTION
Eye/face protection: Safety glasses with side-shields conforming to EN 166. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).
Skin protection: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove’s outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.
Body protection: Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
Respiratory protection: For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection, use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Section 9. Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Physical State</th>
<th>Solid.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color</td>
<td>Needle white crystalline powder with shine.</td>
</tr>
<tr>
<td>Boiling Point</td>
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</tr>
<tr>
<td>Melting Point</td>
<td>49-52°C</td>
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<tr>
<td>Solubility</td>
<td>Soluble in water.</td>
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<tr>
<td>Flash Point</td>
<td>114°C</td>
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<tr>
<td>Lower explosion limit</td>
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<tr>
<td>Upper explosion limit</td>
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<tr>
<td>Water solubility</td>
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<td>Relative vapor density</td>
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</tr>
<tr>
<td>Physical State</td>
<td>Physical State</td>
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<tr>
<td>Volatility</td>
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<tr>
<td>Density</td>
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<tr>
<td>pH</td>
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</tr>
<tr>
<td>Ignition temperature</td>
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</tr>
<tr>
<td>Autoignition temperature</td>
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<tr>
<td>Vapor pressure</td>
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</tr>
<tr>
<td>Odor</td>
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</tr>
<tr>
<td>Odor Threshold</td>
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</tr>
<tr>
<td>Evaporation rate</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

Section 10. Stability and Reactivity

**Stability**

Stable under recommended storage conditions.

**Materials To Avoid**

Strong oxidizing agents, bases acid chlorides, acid anhydrides.

**Hazardous Decomposition Products**

Hazardous decomposition products formed under fire conditions. - Carbon oxides.
Section 11. Toxicological Information

Oral LD50
Mouse - 490 mg/kg

Inhalation LC50
Not available.

Dermal LD50
Not available.

Other information on acute toxicity
Not available.

Skin corrosion/irritation
Not available.

Serious eye damage/irritation
Not available.

Respiratory or skin sensitization
Not available.

Germ cell mutagenicity
Not available.

Carcinogenicity
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.
ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive Toxicity
Not available.

Aspiration Hazard
Not available.

Specific organ toxicity single exposure (GHS)
Inhalation - May cause respiratory irritation.

Specific organ toxicity repeated exposure (GHS)
Not available.

Additional Information
RTECS: RT1215000

Signs and symptoms of exposure
Depending on the intensity and duration of exposure, effects may vary from mild irritation to severe destruction of tissue. Prolonged or repeated exposure can cause damage to the eyes. Stomach - irregularities - based on human evidence.

Potential Health Effects
Inhalation - Acute toxicity. Harmful if inhaled.
Skin - Acute toxicity. Harmful if absorbed through skin. Causes skin irritation.
Eyes - May cause eye irritation.
Ingestion - Acute toxicity. Harmful if swallowed.

Section 12. Ecological Information

Toxicity
Toxicity to fish
LC50 - Pimephales promelas (fathead minnow) - 54.9 mg/l - 96 h

Mobility in soil
Not available.

PBT and vPvB assessment
PBT/vPvB assessment not available as chemical safety assessment not required not
Section 13. Disposal Considerations

**Waste Disposal**
Dispose of material according to all federal, state and local regulations. Offer material to a licensed, professional waste disposal company to dispose of as unused product. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Section 14. Transport Information

**DOT (US)** Not dangerous goods.

**IATA** Not dangerous goods.

**IMDG** Not dangerous goods.

Section 15. Regulatory Information

**SARA 302 Components** SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components** SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**SARA 311/312 Components** No SARA hazards.

**Massachusetts Right To Know Components** No components are subject to the Massachusetts Right to Know Act.

**Pennsylvania Right To Know Components** Paeonol CAS #: 552-41-0 Revision Date:

**New Jersey Right To Know Components** Paeonol CAS #: 552-41-0 Revision Date:

**California Prop 65 Components** This product does not contain any chemicals known to the State of California to cause cancer, birth defects or any other reproductive harm.

Section 16. Other Information

**Other information** The information in this document is believed to be correct but is not necessarily complete. LKT does not guarantee the accuracy of the information. The burden of verifying the information in this document rests solely upon the user.