Section 1. Product and Company Identification

Product Name: Ropinirole Hydrochloride
Product ID: R5661
Chemical Name (Synonyms): SKF-101468A
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
Emergency Phone #: 1-800-424-9300

Section 2. Hazards Identification

GHS Classification

GHS Label elements including precautionary statements

Pictogram

Signal word: Warning

Hazard and precautionary statements

Hazard statement
H302 - Harmful if swallowed.
H410 - Very toxic to aquatic life with long lasting effects.
Precautionary statements
P264 - Wash skin thoroughly after handling.
P270 - Do not eat, drink or smoke when using this product.
P273 - Avoid release to the environment.
P301 + P312 + P330 - IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth.
P391 - Collect spillage.
P501 - Dispose of contents/container to an approved waste disposal plant.

HMIS Classification

Health hazard: 2
Chronic health hazard: 0
Flammability: 0
Physical hazard: 0

NFPA Rating

Health hazard: 2
Fire hazard: 0
Physical hazard: 0

Potential Health Effects

Inhalation - May be harmful if inhaled. May cause respiratory tract irritation.
Skin - May be harmful if absorbed through skin. May cause skin irritation.
Eyes - May cause eye irritation.
Ingestion - May be harmful if swallowed.

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>( \text{C}<em>{16}\text{H}</em>{24}\text{N}_2\text{O} \cdot \text{HCl} )</td>
<td>Formula Wt. 296.84</td>
</tr>
<tr>
<td>CAS No.</td>
<td>91374-20-8</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 water as a precaution.

**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**
Not available.

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

**Firefighting Procedures**
Wear self-contained breathing apparatus for fire fighting if necessary.

**Unusual Fire Hazards**
Carbon oxides, nitrogen oxides (NOx), hydrogen chloride gas.

Section 6. Accidental Release Measures

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

**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. Further processing of solid materials may result in the formation of combustible dusts. The potential for combustible dust formation should be taken into consideration before additional processing occurs. Provide appropriate exhaust ventilation at places where dust is formed.

**Storage Conditions**
Keep container tightly closed in a dry and well-ventilated place. Recommended storage temperature: +4°C. Keep in a dry place. Storage class(TRGS 510): Non combustible solids.

**Hazardous Decomposition Products**
Not available.

**Other Remarks**

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Ingestion - May be harmful if swallowed.
Section 8. Exposure Controls/Personal Protection

**Personal protective equipment**

**EXPOSURE CONTROLS**
Contains no substances with occupational exposure limit values.
Hazardous components without workplace control parameters.
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 OVAG/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>Color</th>
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<tbody>
<tr>
<td>Solid</td>
<td>Light yellow powder.</td>
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<table>
<thead>
<tr>
<th>Boiling Point</th>
</tr>
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<tbody>
<tr>
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</table>

<table>
<thead>
<tr>
<th>Melting Point</th>
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</thead>
<tbody>
<tr>
<td>241°C-243°C</td>
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</table>

<table>
<thead>
<tr>
<th>Solubility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Soluble in water.</td>
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</table>

<table>
<thead>
<tr>
<th>Flash Point</th>
</tr>
</thead>
<tbody>
<tr>
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</table>

<table>
<thead>
<tr>
<th>Water solubility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Soluble in water.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Partition coefficient: n-octanol/water</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not available.</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Relative vapor density</th>
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</thead>
<tbody>
<tr>
<td>Not available.</td>
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</table>

Section 10. Stability and Reactivity

**Stability**
Stable under recommended storage conditions.

**Materials To Avoid**
Strong oxidizing agents.

**Hazardous Decomposition Products**
Not available.
Section 11. Toxicological Information

**Oral LD50**
Rat - 396 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.

**Reproductive Toxicity**
Developmental toxicity - Rat - Oral
Effects on Embryo or Fetus: Fetotoxicity (except death, e.g., stunted fetus).

**Specific organ toxicity single exposure (GHS)**
Not available.

**Specific organ toxicity repeated exposure (GHS)**
Not available.

**Teratogenicity**
Not available.

**Aspiration Hazard**
Not available.

**Synergistic effects**
Not available.

**Additional Information**
RTECS: NM3288250
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. May cause respiratory tract irritation. Skin - May be harmful if absorbed through skin. May cause skin irritation. Eyes - May cause eye irritation. Ingestion - May be harmful if swallowed.

**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.

Section 12. Ecological Information

**Toxicity**
Toxicity to fish: LC50 - Pimephales promelas (fathead minnow) - 0.394 mg/l - 96.0 h Remarks: Preceding date was determined using Quantitative Structure Activity Relationship (Qsar) modeling.

**Mobility in soil**
Not available.

**PBT and vPvB**
PBT/vPvB assessment not available as chemical safety assessment not required/not
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.

Section 13. Disposal Considerations

Section 14. Transport Information

DOT (US) Not dangerous goods.

IATA UN number: 3077 Class: 9 Packing group: III Proper shipping name: Environmentally hazardous substance, solid, n.o.s. (Ropinirole hydrochloride)

IMDG UN number: 3077 Class: 9 Packing group: III EMS No: F-A, S-F Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Ropinirole hydrochloride) Marine pollutant: yes

Further Information EHS - Mark required (ADR 2.2.9.1.10, IMDG code 2.10.3) for single packagings and combination packagings containing inner packagings with Dangerous Goods > 5L for liquids or > 5kg for solids.

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 Acute health hazard

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

Pennsylvania Right To Know Components Ropinirole hydrochloride CAS No. 91374-20-8 Revision Date:

New Jersey Right To Know Components Ropinirole hydrochloride CAS No. 91374-20-8 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.