Section 1. Product and Company Identification

**Product Name**  
Tamsulosin Hydrochloride

**Product ID**  
T0251

**Chemical Name**  
(Synonyms)
Flomax; Harnal; Pradif

**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**
Acute toxicity, Oral (Category 4), H302  
Skin irritation (Category 2), H315  
Eye irritation (Category 2A), H319  
Specific target organ toxicity - single exposure (Category 3), Respiratory system, H335

**Potentially 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.

**GHS Label elements including precautionary statements**

**Pictogram**

**Signal word**  
Warning

**Hazard and precautionary statements**

**Hazard statements**
H302 - Harmful if swallowed.  
H315 - Causes skin irritation.  
H335 - May cause respiratory irritation.

**Precautionary statements**
P261 - Avoid breathing dust, fumes, gas, mist, vapors and 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.  
P280 - Wear protective gloves, eye protection and face protection.  
P301 + P312 - IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.  
P302 + P352 - IF ON SKIN: Wash with plenty of soap and water.  
P304 + P340 - IF INHALED: Remove victim to fresh

**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
Ingestion - May be harmful if swallowed.

Section 3. Composition/Information on Ingredients

Substances

<table>
<thead>
<tr>
<th>Ingredient: Title Compound</th>
<th>Percent: 100</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formula</td>
<td>C_{20}H_{28}N_{2}O_{5}S • HCl</td>
</tr>
<tr>
<td>CAS No.</td>
<td>106463-17-6</td>
</tr>
<tr>
<td>Formula Wt.</td>
<td>444.98</td>
</tr>
<tr>
<td>EC No.</td>
<td></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

Not available.

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

Do not let product enter drains.

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.

Storage Conditions

Keep container tightly closed in a dry and well-ventilated place. Recommended storage temperature: +4°C

Hazardous Decomposition Products

Carbon oxides, nitrogen oxides (NOx), sulfur oxides, hydrogen chloride gas.

Other Remarks
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: 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 NOISH (US) or CEN (EU).

Section 9. Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Physical State</th>
<th>Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solid</td>
<td>White powder.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Boiling Point</th>
<th>Volatility</th>
</tr>
</thead>
<tbody>
<tr>
<td>228°C-230°C</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Melting Point</th>
<th>Density</th>
</tr>
</thead>
<tbody>
<tr>
<td>228°C-230°C</td>
<td>Not available.</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Solubility</th>
<th>pH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Slightly soluble in water to 10 mM. Weakly soluble in methanol. DMSO to 100 mM.</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Flash Point</th>
<th>Ignition temperature</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not available.</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Lower explosion limit</th>
<th>Autoignition temperature</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not available.</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Upper explosion limit</th>
<th>Vapor pressure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not available.</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Water solubility</th>
<th>Odor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Slightly soluble in water to 10 mM.</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Partition coefficient: n-octanol/water</th>
<th>Odor Threshold</th>
</tr>
</thead>
<tbody>
<tr>
<td>log Pow: 2.41</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Relative vapor density</th>
<th>Evaporation rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>15.36 (Air = 1.0)</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.

Hazardous Decomposition Products

Carbon oxides, nitrogen oxides (NOx), sulfur oxides, hydrogen chloride gas.
Section 11. Toxicological Information

**Oral LD50** Not available.
**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** Not available.
**Teratogenicity** Not available.

**Specific organ toxicity single exposure (GHS)** Inhalation - May cause respiratory irritation.
**Specific organ toxicity repeated exposure (GHS)** Not available.

**Aspiration Hazard** Not available.
**Synergistic effects** Not available.

**Additional Information** RTECS: Not available.
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** Not available.
**Mobility in soil** Not available.

**PBT and vPvB assessment** PBT/vPvB assessment not available as chemical safety assessment not required/not
Persistence and degradability  Not available.  Other adverse effects  Not available.
Bioaccumulative potential  Not available.

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.

Section 14. Transport Information
DOT (US)  Not dangerous goods.
IATA  Not dangerous goods.
IMDG  Not dangerous goods.

Section 15. Regulatory Information
Reach No.
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  Tamsulosin Hydrochloride  CAS No.: 106463-17-6  Revision Date:
New Jersey Right To Know Components  Tamsulosin Hydrochloride  CAS No.: 106463-17-6  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.
For emergencies in the USA, call CHEMTREC 800-424-9300