# Safety Data Sheet

## Section 1. Product and Company Identification

<table>
<thead>
<tr>
<th>Product Name</th>
<th>Carboplatin / cis-Diammine[1,1 cyclobutane dicarboxylato] platinum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product ID</td>
<td>C0171</td>
</tr>
<tr>
<td>Chemical Name (Synonyms)</td>
<td>Paraplatin</td>
</tr>
</tbody>
</table>

**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
- Acute toxicity, Skin (Category 4), H312
- Skin sensitization (Category 1), H317
- Acute toxicity, Inhalation (Category 4), H332
- Respiratory sensitization (Category 1), H334
- Germ cell mutagenicity (Category 1B), H340
- Reproductive toxicity (Category 1B), H360

**GHS Label elements including precautionary statements**

### Pictogram

- Danger

### Hazard and precautionary statements

**Hazard statements**
- H302 + H312 + H332 - Harmful if swallowed, in contact with skin or inhaled.
- H317 - May cause an allergic skin reaction.
- H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled.
- H340 - May cause genetic defects.
- H360 - May damage fertility or the unborn child.

**Precautionary statements**
- P201 - Obtain special instructions before use.
- P202 - Do not handle until all safety precautions have been read and understood.
- 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.
- P272 - Contaminated work clothing should not be allowed out of the workplace.
- P280 - Wear protective gloves and/or protective clothing.
- P281 - Use personal protective equipment as required.
- P285 - In case of inadequate ventilation wear respiratory protection.
- P301 + P312 + P330 - IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth.
- P302 + P352 + P312 - IF ON SKIN: Wash with plenty of soap and water. Call a POISON CENTER or doctor/physician if you feel unwell.
- P304 + P340 + P312 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.
- P308 + P313 - IF exposed or concerned: Get medical advice and/or attention.
- P333 + P313 - IF skin irritation or rash occurs: Get medical advice and/or attention.
- P363 - Wash contaminated clothing before reuse.
- P405 - Store locked up.
- P501 - Dispose of contents and/or container to an approved waste disposal plant.

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

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

**Potential Health Effects**
- Inhalation - Acute toxicity. Harmful if inhaled. May cause respiratory irritation.
- Skin - Acute toxicity. Harmful in contact with skin. May cause allergic skin reaction. May cause allergy or asthma symptoms or breathing difficulties if inhaled.
- Eyes - May cause eye irritation. Ingestion - Acute toxicity. Harmful if swallowed.
Section 3. Composition/Information on Ingredients

<table>
<thead>
<tr>
<th>Substances</th>
<th>Formula</th>
<th>Formula Wt.</th>
<th>CAS No.</th>
<th>EC No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formula</td>
<td>C₆H₁₂N₂O₄Pt</td>
<td>371.25</td>
<td>41575-94-4</td>
<td>255-446-0</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).

Section 6. Accidental Release Measures

**Personal Precautions**
Use personal protective equipment. Avoid dust formation. Avoid breathing dust, vapors, mist, dust, 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.

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

**Storage Conditions**
Store in a tightly closed container in a dry and well-ventilated place. Recommended Storage Temperature: -20°C.

**Hazardous Decomposition Products**
Not available.

**Other Remarks**
None.
Section 8. Exposure Controls/Personal Protection

**Personal protective equipment**

**EXPOSURE CONTROLS**
Contains no substances with occupational exposure limit values. Wash hands before breaks and at the end of workday.

**PERSONAL PROTECTIVE EQUIPMENT**

**Eye/face protection:** Face shield and safety glasses 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. Full and splash contact - Material: nitrile rubber. Minimum layer thickness: 0.11 mm, Break through time: 480 min., Material tested: Dermatril® (KCL 740 / Aldrich Z677272, Size M).

**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: Where risk assessment shows air-purifying respirators are appropriate, use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. 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>
</tr>
</thead>
<tbody>
<tr>
<td>Solid</td>
<td>White crystal powder.</td>
</tr>
</tbody>
</table>

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

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

<table>
<thead>
<tr>
<th>Solubility</th>
<th>pH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Soluble in water.</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>Upper explosion limit</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>Soluble in water.</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>Not available.</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>Not available.</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

Section 10. Stability and Reactivity

**Stability**
Stable under recommended storage conditions.

**Materials To Avoid**
Not available.

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

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral LD50</td>
<td>Rat - 343 mg/kg</td>
</tr>
<tr>
<td>Skin corrosion/irritation</td>
<td>Not available.</td>
</tr>
<tr>
<td>Inhalation LC50</td>
<td>Not available.</td>
</tr>
<tr>
<td>Serious eye damage/irritation</td>
<td>Not available.</td>
</tr>
<tr>
<td>Dermal LD50</td>
<td>Not available.</td>
</tr>
<tr>
<td>Respiratory or skin sensitization</td>
<td>May cause allergic respiratory and skin reactions.</td>
</tr>
<tr>
<td>Other information on acute toxicity</td>
<td>Not available.</td>
</tr>
<tr>
<td>Germ cell mutagenicity</td>
<td>In vivo tests showed mutagenic effects. No data available.</td>
</tr>
<tr>
<td>Reproductive Toxicity</td>
<td>Presumed human reproductive toxicant.</td>
</tr>
<tr>
<td>Aspiration Hazard</td>
<td>May cause allergic respiratory and skin reactions.</td>
</tr>
<tr>
<td>Specific organ toxicity single exposure (GHS)</td>
<td>Not available.</td>
</tr>
<tr>
<td>Specific organ toxicity repeated exposure (GHS)</td>
<td>Not available.</td>
</tr>
<tr>
<td>Teratogenicity</td>
<td>Presumed human reproductive toxicant.</td>
</tr>
<tr>
<td>Additional Information</td>
<td>RTECS: TP2300000</td>
</tr>
<tr>
<td>Signs and symptoms of exposure</td>
<td>Vomiting, prolonged or repeated exposure can cause: liver and/or kidney injury may occur. Stomach - irregularities - based on human evidence.</td>
</tr>
<tr>
<td>Potential Health Effects</td>
<td>Inhalation - Acute toxicity. Harmful if inhaled. May cause respiratory irritation. Skin - Acute toxicity. Harmful in contact with skin. May cause allergic skin reaction. May cause allergy or asthma symptoms or breathing difficulties if inhaled. Eyes - May cause eye irritation. Ingestion - Acute toxicity. Harmful if swallowed. Ingestion - Acute toxicity. Harmful if swallowed. Reproduction: May cause genetic defects. May damage fertility or the unborn child.</td>
</tr>
<tr>
<td>Carcinogenicity</td>
<td>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.</td>
</tr>
</tbody>
</table>

### Section 12. Ecological Information

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toxicity</td>
<td>Not available.</td>
</tr>
<tr>
<td>Mobility in soil</td>
<td>Not available.</td>
</tr>
<tr>
<td>PBT and vPvB assessment</td>
<td>PBT/vPvB assessment not available as chemical safety assessment not required/ not</td>
</tr>
</tbody>
</table>
Waste Disposal

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

Persistence and degradability

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. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Dispose of as unused product.

Section 14. Transport Information

**DOT (US)**

Not dangerous goods.

**IATA**

Not dangerous goods.

**IMDG**

Not dangerous goods.

Further Information

Section 15. Regulatory Information

**Reach No.**

**SARA 302 Components**

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

**SARA 313 Components**

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, chronic health hazard.

**Massachusetts Right To Know Components**

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

**Pennsylvania Right To Know Components**

Carboplatin / cis-Diammine[1,1 cyclobutane dicarboxylato] platinum  CAS #: 41575-94-4  Revision Date: 2007-09-28

**New Jersey Right To Know Components**

Carboplatin / cis-Diammine[1,1 cyclobutane dicarboxylato] platinum  CAS #: 41575-94-4  Revision Date: 2007-09-28

**California Prop 65 Components**

WARNING! This product contains a chemical known to the State of California to cause birth defects or other reproductive harm. Carboplatin / cis-Diammine[1,1 cyclobutane dicarboxylato] platinum  CAS #: 41575-94-4  Revision Date: 2007-09-28

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.