Safety Data Sheet
Product: Chem Sharp Chemical Tungsten Sharpener

Identification 600B
Product Use Description: Chemically mills and sharpens pure, thoriated, ceriated and lanthanated tungsten.
Trade Name: Chem Sharp Chemical Tungsten Sharpener
Manufacturers Name: Dynaflux, Inc.
241 Brown Farm Rd.
Cartersville, GA 30120 U.S.A.

Part 2: Hazards Identification

Signal Word: DANGER
Hazard statement(s)
H272 May intensify fire; oxidizer.
H301 Toxic if swallowed.
H319 Causes serious eye irritation.
H410 Very toxic to aquatic life with long lasting
Emergency Overview:
White to slightly crystalline solid. Toxic if swallowed or dust is inhaled.
Oxidizer: May ignite organic materials and react with other materials. Can decompose if mixed with acids or exposed to fire conditions, releasing toxic nitrogen oxides.
OSHA Status: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Potential Health Effects:
Exposure routes:
Eyes, Skin Contact, Inhalation, Ingestion.

Eye contact: May strongly irritate or burn the eyes.
Skin contact: May cause skin irritation.
Inhalation: Product mists may cause irritation to the respiratory tract.
Ingestion: May irritate the gastrointestinal tract. Although small quantities are used in food preparation, swallowing moderate amounts of sodium nitrite can result in serious toxic effects including death. Effects include nausea, weakness, cyanosis (blue skin), collapse and coma, possible leading to death. Sodium nitrite interferes with the blood’s ability to transport oxygen.

HMIS Rating (U.S.) Health 2, Flammability 0, Reactivity 1

Part 3: Composition / Information on Ingredients

<table>
<thead>
<tr>
<th>Hazardous Components</th>
<th>CAS No.</th>
<th>% by weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium nitrite</td>
<td>7632-00-00</td>
<td>&gt;75</td>
</tr>
</tbody>
</table>

Toxicological Date on Ingredients: Sodium nitrite LD50: Acute: 180 mg/kg [Rat]. 175 mg/kg [Mouse].
GHS: Category 3
Part 4: First Aid Measures

Eyes
Check for and remove any contact lenses. Immediately flush eyes with water for at least 15 minutes. Get medical attention if irritation persists. **GHS Category 2A**

Skin
After contact with skin, wash immediately with plenty of water. Gently and thoroughly wash the contaminated skin with running water and non-abrasive soap. If irritation develops seek medical attention. **GHS Category 2**

Inhalation
Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get prompt medical attention. **GHS: Category 3**

Ingestion:
Do not induce vomiting. Immediately give large quantities of water. Get medical attention immediately.

**Note to Physician:** Sodium nitrite forms met hemoglobin in the blood stream. Treat accordingly.

Part 5: Fire Fighting Measures

**Flammable Properties:**

Flammability Classification: Non-flammable.
Auto-Ignition Temperature: Not Applicable.
Flash Points: Not Applicable.
Fire Fighting Instructions/Equipment: Use flooding amounts of water or other agents.
Special Remarks on Explosion Hazards: Not Available.

**Unsuitable Extinguishing Media:** Do NOT use dry chemicals containing ammonium phosphate.

**Explosive Limits**

Hazardous Combustion Products: Oxides of nitrogen.
Impact Sensitivity: No information available.
Sensitivity to Static discharge: No information available.

Specific Hazards Arising from the Chemical:
Material does not burn but is an oxidizing agent and will support combustion of other materials. Product decomposes above 608°F releasing toxic nitrogen oxides.

**Protective Equipment and Precautions for Firefighters:**
Wear self-contained breathing apparatus (SCBA) and full protective equipment.

Part 6: Accidental Release Measures

In case of Spill or Other Release:
Remove sources of ignition. Ventilate area. Use non-sparking tools and equipment. Sweep or shovel spilled material into metal containers. Dispose of material according to local, state and federal authorities. Do not allow product or residues to enter waterways and/or any source of drinking water.

Part 7: Handling and Storage

**Handling**
Avoid contact with skin and eyes. Do not breathe product dusts. Avoid contact with incompatible, combustible organic or readily oxidizing materials.

**Storage**
Store in a cool, dry, well-ventilated area. Keep containers tightly closed. Do not store on wooden floors. Isolate from combustible materials. Empty containers may contain product residues; observe all warnings and precautions listed for the product.
Part 8: Exposure Controls / Personal Protection

Engineering Controls:
Use local exhaust to keep airborne concentrations below the permissible exposure limits.

Respiratory Protection:
A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 or applicable federal/provincial requirements must be followed whenever workplace conditions warrant respirator use.

Skin Protection:
Wear appropriate personal protective clothing to prevent skin contact. If prolonged or repeated contact is anticipated, all clothing should be impervious to liquid.

Eye Protection:
Wear chemical safety goggles. Do not wear contact lenses.

Part 9: Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Crystals</td>
</tr>
<tr>
<td>Color</td>
<td>White to slightly yellow</td>
</tr>
<tr>
<td>Odor</td>
<td>None</td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>No information available</td>
</tr>
<tr>
<td>Physical State</td>
<td>Solid</td>
</tr>
<tr>
<td>Physical State</td>
<td>~9.0 (for aqueous solution)</td>
</tr>
<tr>
<td>Flash Point</td>
<td>Not flammable</td>
</tr>
<tr>
<td>Auto-ignition Temperature</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Boiling Point /Range</td>
<td>Decomposes above 608°F</td>
</tr>
<tr>
<td>Melting point/Range</td>
<td>520°F</td>
</tr>
<tr>
<td>Flammability Limits in Air</td>
<td>No information available</td>
</tr>
<tr>
<td>Explosive Properties</td>
<td>No information available</td>
</tr>
<tr>
<td>Oxidizing Properties</td>
<td>Oxidant</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>NA</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Vapor Density</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>2.17</td>
</tr>
<tr>
<td>VOC Content (%)</td>
<td>0</td>
</tr>
</tbody>
</table>

Part 10: Stability and Reactivity

Stability
Normally stable

Conditions to avoid:
Material slowly oxidizes to sodium nitrate when exposed to air. Avoid heat, flame, ignition sources, shock, friction and incompatibilities.
Incompatible Products:
Hazardous reactions can occur with acids, ammonium compounds, reducing agents (particularly cyanides, thiocyanates and thiosulfates). May ignite organic compounds and other combustible materials.

Hazardous Decomposition Products:
Oxides of nitrogen (toxic and irritating).

Polymerization:
Will not occur

Part 11. Toxicological Information

CHRONIC TOXICITY

<table>
<thead>
<tr>
<th>Carcinogenicity</th>
<th>There is no known carcinogenic chemicals in this product.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mutagenic Effects</td>
<td>No information available.</td>
</tr>
<tr>
<td>Reproductive Effects</td>
<td>No information available.</td>
</tr>
<tr>
<td>Developmental Effects</td>
<td>No information available.</td>
</tr>
<tr>
<td>Teratogenicity</td>
<td>Multiple reproductive tests indicate that sodium nitrite is not teratogenicity.</td>
</tr>
<tr>
<td>Target Organ Effects</td>
<td>No information available.</td>
</tr>
</tbody>
</table>

Part 12. Ecological Information
Contains no substances known to be hazardous to the environment or not degradable in waste water treatment plants.

| Persistence and Degradability | No information available. |
| Bioaccumulation | No information available. |
| Mobility in Environmental Media | No information available. |

Part 13. Disposal Considerations
Disposal Method: Dispose in accordance with federal, state and local regulations.

Part 14. Transport Information
DOT Classification: ORM-D

IMDG:
| Hazard Class: | 5.1 |
| Subsidiary Hazard Class: | 6.1 |
| UN-No: | UN1500 |
| Packing Group: | PGIII |
Part 15. Regulatory Information

U.S. Toxic Substances Control Act (TSCA): All ingredients contained in this product are listed on the U.S. EPA TSCA Chemical Substance Inventory.

SARA 311/312 Hazardous Categorization

- Chronic Health Hazard: No
- Acute health Hazard: Yes
- Fire Hazard: Yes
- Sudden Release of Pressure Hazard: Yes
- Reactive Hazard: Yes

CLEAN WATER ACT

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS-No.</th>
<th>Weight%</th>
<th>SARA 13-Threshold Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium nitrite</td>
<td>7632-00-0</td>
<td>&gt;75</td>
<td>1.0</td>
</tr>
</tbody>
</table>

CERCLA

<table>
<thead>
<tr>
<th>Component</th>
<th>CERCLA RQ (lb)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium nitrite</td>
<td>100 lb</td>
</tr>
</tbody>
</table>

U.S. State Regulations
California Proposition 65
This product does not contain any Proposition 65 chemicals.

Part 16. Other Information

Dynaflux, Inc.
241 Brown Farm Rd.
Cartersville, GA 30120
Prepared by: E. Schaffstall

Disclaimer of Expressed and implied Warranties:
The information presented in this Safety Data Sheet is based on data believed to be accurate as of the date of the Safety Data Sheet was prepared. No responsibility is assumed for any damage or injury resulting from abnormal use or from any failure to adhere to recommended practices as specified on the label copy.