Product Name: Bimetal Bandsaw Blade
Product Class: Steel

SECTION I – MANUFACTURER IDENTIFICATION

Manufacturer’s Name: Contour Saws, Inc.
Address: 1217 Thacker Street, Des Plaines, Illinois 60016
Phone: 847-824-1146
Date Prepared: April 27, 2000

SECTION II – HAZARDOUS INGREDIENTS IDENTIFICATION

No permissible exposure limits (PEL) or threshold limit value (TVL) exist for steels. The following values are applicable to component elements:

<table>
<thead>
<tr>
<th>Element</th>
<th>Weight Percentage</th>
<th>CAS Number</th>
<th>OSHA PEL (mg/m³)</th>
<th>ACGIH TLV (mg/m³)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon</td>
<td>0-2.0</td>
<td>1333-86-4</td>
<td>3.50 (As carbon black)</td>
<td>3.50 (As carbon black)</td>
</tr>
<tr>
<td>Chromium</td>
<td>0-5.00</td>
<td>7440-47-3</td>
<td>1.00</td>
<td>0.50</td>
</tr>
<tr>
<td>Iron</td>
<td>70.00-90.00</td>
<td>1309-37-1</td>
<td>10.00 (As iron oxide fume)</td>
<td>5.00 (As iron oxide fume)</td>
</tr>
<tr>
<td>Manganese</td>
<td>0-1.50</td>
<td>7439-96-5</td>
<td>5.00 (Ceiling limit dust)</td>
<td>5.00 (Ceiling limit dust)</td>
</tr>
<tr>
<td>Molybdenum</td>
<td>0-10.00</td>
<td>7439-98-7</td>
<td>5.00 (Soluble compounds)</td>
<td>5.00 (Soluble compounds)</td>
</tr>
<tr>
<td>Nickel</td>
<td>0-2.00</td>
<td>7440-02-0</td>
<td>1.00</td>
<td>0.10 (Soluble compounds)</td>
</tr>
<tr>
<td>Silicon</td>
<td>0-2.00</td>
<td>7440-21-3</td>
<td>None</td>
<td>5.00 (Respirable dust)</td>
</tr>
<tr>
<td>Sulfur</td>
<td>0-0.20</td>
<td>7446-09-5</td>
<td>None</td>
<td>5.00 (As sulfur dioxide)</td>
</tr>
<tr>
<td>Tungsten</td>
<td>0-8.00</td>
<td>7440-37-7</td>
<td>None</td>
<td>1.00 (Soluble compounds)</td>
</tr>
<tr>
<td>Vanadium</td>
<td>0-5.00</td>
<td>1314-62-1</td>
<td>0.50 (Ceiling limit dust)</td>
<td>0.05 (As dust and fume)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>0.10 (As fume)</td>
<td></td>
</tr>
<tr>
<td>Cobalt</td>
<td>0-12.00</td>
<td>7440-48-4</td>
<td>0.10 (As dust)</td>
<td>0.05 (As dust and fume)</td>
</tr>
</tbody>
</table>

Some or various combinations of these components may appear in grades produced. Consult appropriate data sheets or test reports for the specific ordered analysis.

Abbreviations and symbols used in this MSDS:
N/A - Not Applicable  ND - Not Determined
< - Less Than        > - Greater Than
SECTION III – PHYSICAL DATA

- Melting Point: 2400-2850°F
- Specific Gravity: 7.5-8.5
- Boiling Point: N/A
- Solubility in Water: Insoluble
- Vapor Pressure: N/A
- Appearance and Odor: Solid, odorless metal. Metallic gray or luster except when material is painted.

SECTION IV – FIRE AND EXPLOSION DATA

- Flash Point: N/A
- Flammability: Lower Explosive Limit: N/A
- Upper Explosive Limit: N/A
- Extinguishing Media: N/A
- Special Firefighting Procedure: N/A

SECTION V – HEALTH HAZARD DATA

Primary Routes of Exposure

Exposure to specialty steel alloy occurs primarily from inhalation of dust or fumes. However, constituents of these alloys may cause effects directly upon the skin or eyes. Certain constituents may also be harmful if swallowed.

Steel products in the form shipped do not present an inhalation, ingestion, or contact hazard. However, operations such as torch cutting, welding, and grinding may result in the following effects if exposures exceed the limits listed in Section 2, HAZARDOUS INGREDIENTS IDENTIFICATION.

Effects of overexposure:

Acute: Irritation of eyes, nose, or throat, metallic taste in mouth, or metal fume fever. Possible dermatitis.

Chronic: Prolonged over-exposure to alloy dusts or fumes may cause skin, eye, throat, or nose irritations, leading to pulmonary diseases. Excessive and repeated inhalation of chromium and nickel fumes or dust may cause severe irritation, ulceration, and increased risk of cancer in the respiratory system. Excessive and prolonged inhalation of manganese can cause central nervous system damage resembling a Parkinson-like syndrome.

First Aid:

Inhalation- remove to fresh air and get medical attention.

Skin- wash areas well with soap and water.

Eyes- flush well with running water to remove particles and get medical attention.

Ingestion- in the unlikely event that large quantities of metal have been ingested, get medical attention.
SECTION VI – REACTIVITY DATA

Stability—Stable
Conditions to avoid—avoid generation of dust which can present a moderate fire and explosion hazard.
Incompatibility—molten metal will react violently with water.

SECTION VII – PERSONAL PROTECTION INFORMATION

Use general and local exhaust ventilation to keep airborne concentrations of dusts and fumes below the PELs and TLVs of Section II. Employees should wear NIOSH or MSHA approved respirators for protection against dust or fumes. Food should not be consumed in the work area.

Full protective clothing should be worn by workers exposed to heavy concentrations of dust. Gloves and barrier creams may be necessary to prevent skin sensitization and dermatitis.

Approved safety glasses with side shields or goggles should be worn during operations creating eye hazards. A welding hood should be worn when welding or burning. Approved steel-toe shoes with metatarsal guards should be worn for foot protection.

SECTION VIII – SPILL OR LEAK PROCEDURES

Action to take for spills—N/A
Waste disposal methods—N/A

SECTION IX – SPECIAL PRECAUTIONS

Adequate ventilation and/or respiratory protection should be provided if exposure limits in Section 2, INGREDIENTS are exceeded.
Use good housekeeping practices to prevent accumulation of dust and fume and keep airborne dust and fume away.

SECTION X – OTHER INFORMATION

Data in this MSDS is believed to be correct and reliable. However, Contour Saws, Inc. does not assume responsibility for it, or any recommendations contained in it, inasmuch as conditions and methods of use are beyond our control. Further, we make no warranty, expressed or implied, or any kind of regarding this product or its use, and purchaser assumes all risks of use or handling either in accordance with directions or not.