

MATERIAL SAFETY DATA SHEET

Lenox[®] Saw Blades

SECTION 1: GENERAL INFORMATION

Manufacturer's Name: American Saw & Mfg. Company Emergency Telephone Number: (413) 525-3961

Address: 301 Chestnut Street Date: June 12, 2001

East Longmeadow, MA 01028-0504

Product Name: Lenox[®] Saw Blades Chemical Family: Steel; Refractory Metal Carbide

Chemical Name and Synonyms: Carbon Steel Alloy Steel High Speed Steel Carbide Formula: Metal and Carbide Materials, see Section 2 below

SECTION 2: HAZARDOUS INGREDIENTS

Lenox[®] saw blades are manufactured from metals into solid, stable and inert blades. Under normal sawing conditions, the saw blades are considered to be articles in that they do not release more than very small quantities of a hazardous material(s) and do not pose a physical hazard or health risk to employees. Hazardous materials may be released if the blades are welded, cut, grinded, or otherwise generate dust or fume. This MSDS was prepared to address the potential for exposure to dust and/or fume.

The actual composition of the saw blades varies depending on the type of saw blade and the grade of steel it is made from. Each blade may contain any of the following ingredients:

SAW BLADE METAL ALLOY COMPONENTS

<u>INGREDIENT</u>	<u>MAX %</u>	<u>CAS NUMBER</u>	<u>OSHA PEL (mg/M³)</u> (Time Weighted Average (TWA) unless otherwise noted)	<u>ACGIH TLV[®] (mg/M³)</u>
Carbon	<2	7440-44-0	Not Established	Not Established
Chromium	<5	7440-47-3	1 (as metal)	0.5
Cobalt	<9	7440-48-4	0.1	0.02
Iron	<90	7439-89-6	10 (as oxide fume)	5 (as oxide dust or fume)
Manganese	<2	7439-96-5	5 Ceiling	0.2
Molybdenum	<10	7439-98-7	15 (insoluble)	10 (insoluble)
Nickel	<2	7440-02-0	1	1.5 (elemental)
Silicon	<2	7440-21-3	15	10
Tungsten	<7	7440-33-7	Not Established	5-TWA; 10-STEL
Vanadium	<3	7440-62-2	0.1 Ceiling (as oxide)	0.05 (as oxide)

The metal alloy may also contain less than one percent of sulfur, phosphorous, aluminum, copper, tin, calcium, antimony, niobium, and arsenic.

CARBIDE-TIPPED TOOTH COMPONENTS

<u>INGREDIENT</u>	<u>MAX %</u>	<u>CAS NUMBER</u>	<u>OSHA PEL (mg/M³)</u>	<u>ACGIH TLV[®] (mg/M³)</u>
Cobalt	<11	7440-48-4	0.1	0.02
Tantalum Carbide	<3	12070-06-3	Not Established	Not Established
Tungsten Carbide	<87	12070-12-1	Not Established -	Not Established

The carbide tooth alloy may also contain less than one percent of chromium carbide.

SECTION 3: PHYSICAL DATA

<u>Boiling point</u>	N/A	<u>Vapor pressure</u>	N/A
<u>Melting point</u>	Approximately 2800°F	<u>Vapor density</u>	N/A
<u>Solubility in water</u>	Insoluble	<u>Specific gravity (H2O=1)</u>	Approx. 8
<u>Appearance</u>	Solid, gray or black metal	<u>Percent volatile</u>	N/A
<u>Evaporation Rate</u>	N/A	<u>Odor</u>	None

SECTION 4: FIRE AND EXPLOSION DATA

Saw blades are made from non-combustible metals.

In the event of a fire a Class D fire extinguisher may be necessary to extinguish the saw blades.

SECTION 5: HEALTH HAZARD DATA

The following health hazard data addresses exposure to unhealthy concentrations of airborne dusts and/or fumes.

ROUTE OF ENTRY

Inhalation
Eye Contact
Skin Contact
Ingestion

EMERGENCY FIRST AID

Move person to fresh air. Seek medical attention as appropriate.
Flush eyes with large amounts of water. Get medical attention.
Vacuum or brush off excess dust. Wash area with soap and water.
Seek medical attention or call Poison Control Center.

The following health hazards are based on the individual health hazards of the components in either a dust or oxidized fume state. These are summarized as follows:

Carbon - Irritation eyes, skin, and respiratory system.

Chromium - irritation eyes, skin, and respiratory system, sensitization dermatitis, lung fibrosis; oxidizing chromium metal may generate hexavalent chromium, which is a human carcinogen .

Cobalt - cough, dyspnea, wheezing, decreased pulmonary function, weight loss, dermatitis, diffuse nodular fibrosis, respiratory hypersensitivity, asthma. Possible human carcinogen (IARC Group 2B).

Iron - Benign pneumoconiosis (siderosis).

Manganese - Parkinson's, asthenia, insomnia, mental confusion, metal fume fever, dry throat, tightness in chest, dyspnea, rales, flu-like fever, low back pain, vomiting, malaise, fatigue, kidney damage.

Molybdenum - irritation to eyes, skin, respiratory system, anorexia, incoordination, dyspnea, anemia.

Nickel - sensitization dermatitis, allergic asthma, pneumonitis. Reasonably anticipated to cause cancer (NTP).

Silicon - irritation to respiratory system.

Tungsten - irritation to eyes, skin, respiratory system, diffuse pulmonary fibrosis, loss of appetite, nausea, coughing, blood changes.

Tungsten Carbide - Irritation to eyes, skin, and respiratory system, skin sensitization, diffuse pulmonary fibrosis, loss of appetite, nausea, cough, blood changes.

Vanadium - irritation to eyes skin, respiratory system, fine rales, wheezing, bronchitis, and dyspnea.

SECTION 6: REACTIVITY DATA

Stability: Saw blades are stable.

Incompatibility: Reaction with strong acids and oxidizers may release hydrogen gas and other reaction byproducts.

Hazardous Decomposition Products: Metallic oxides and/or metal fumes from welding, burning or melting operations.

Polymerization: Will not occur.

SECTION 7: SPILL OR LEAK PROCEDURES

Saw blade dust should be cleaned up to avoid dust generation or release to the environment. Dust disposal needs to be performed following all applicable federal, state and local laws, regulations and policies.

SECTION 8: SPECIAL PROTECTION INFORMATION

Ventilation: Mechanical ventilation should be used to capture and exhaust potentially hazardous dusts and fumes away from breathing zones.

Personal Protective Equipment:

Eyes: ANSI Z87.1 approved eye protection should be worn when the potential for eye contact with the saw blade, dusts or fumes. At a minimum, side shields on safety spectacles should be used.

Skin: Cut resistant gloves when handling the saw blades; other body protection as appropriate.

Respiratory System: NIOSH approved respirators should be worn when the potential for exposure to metal particulates are anticipated to be in the range of or above a PEL or TLV®.

SECTION 9: SPECIAL PRECAUTIONS

Saw blades may be coated with a thin layer of light preservative oil as a rust inhibitor. The blades may also be painted for cosmetic or labeling reasons. These coatings are not believed to create any health or physical hazards.

SECTION 10: ENVIRONMENTAL REPORTING

Releases to the environment of ingredients in the saw blades may be reportable to federal, state and or local agencies.