



MATERIAL SAFETY DATA SHEET



SECTION 1 - PRODUCT IDENTIFICATION

Saturn Industries, Inc.

Union Turnpike

Hudson

NY

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PRODUCT NAME AND SYNONYMS

Molybdenum (metal, powder, wire, fabricated parts, scrap, etc.)

MSDS IDENTIFICATION

Molybdenum

SECTION 2 - INGREDIENTS

	%	PEL (OSHA)	TLV (ACGIH)
Molybdenum	ca 100	15 mg/cu.m. (as Mo) (Insoluble compounds)	10 mg/cu.m.
		5 mg/cu.m. (as Mo) (Soluble compounds)	Same

Percentage may be lower in the scrap.

SECTION 3 - PHYSICAL DATA

BOILING POINT, 760mm Hg	ca 8700 F	MELTING POINT	ca 4750 F
SPECIFIC GRAVITY (H2O=1)	10.2	VAPOR PRESSURE @ 21 C, mm Hg	N/A
VAPOR DENSITY (AIR=1)	N/A	SOLUBILITY IN H2O, g/100 g	Insoluble
% VOLATILES BY VOLUME	0	EVAPORATION RATE, = 1	N/A

APPEARANCE AND ODOR

Color is dark grey or black, no odor.

SECTION 4 - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (AND METHOD USED)	FLAMMABLE LIMITS IN AIR % BY VOLUME		AUTO IGNITION TEMPERATURE
	LOWER	UPPER	
None	N/A	N/A	N/A

EXTINGUISHING

MEDIA WATER FOG FOAM CO2 DRY CHEMICAL OTHER

SPECIAL FIRE FIGHTING PROCEDURES

Extinguish powder fire by application of sand or fine granular limestone to all exposed surfaces. Once covered, material should not be disturbed until completely extinguished and allowed to cool.

UNUSUAL FIRE AND EXPLOSION HAZARD

After ignition source is removed, the metal powder continues to glow until complete oxidation has taken place.

SECTION 5 - REACTIVITY DATA

STABILITY (NORMAL CONDITIONS)	CONDITIONS TO AVOID	HAZARDOUS POLYMERIZATION
<input checked="" type="checkbox"/> STABLE <input type="checkbox"/> UNSTABLE	N/A	<input type="checkbox"/> MAY OCCUR <input checked="" type="checkbox"/> WILL NOT OCCUR

INCOMPATIBILITY (MATERIALS TO AVOID)

Reacts with halogens, slowly oxidized by steam.

HAZARDOUS DECOMPOSITION PRODUCTS

Molybdenum, when heated, may oxidize to the more toxic molybdenum trioxide.

MATERIAL SAFETY DATA SHEET (MSDS - CONTINUED)

SECTION 6 - HEALTH HAZARD INFORMATION

EXPOSURE CRITERIA

See Section 2.

EFFECTS OF OVEREXPOSURE

Inhalation - There is little data regarding the effects on humans of overexposure to molybdenum and its compounds. Inhalation tests with animals have shown overexposure to result in irritation of eyes, nose, and throat, loss of appetite, and muscular incoordination.

Ingestion - Ingestion of toxic quantities are not likely in an industrial setting. Animal tests indicate overexposure to molybdenum compounds may result in diarrhea and anemia.

Eye contact - May result in slight irritation.

EMERGENCY AND FIRST AID PROCEDURES

None anticipated under normal use.

SECTION 7 - SPECIAL PROTECTION INFORMATION

VENTILATION REQUIREMENTS

If necessary, use local exhaust ventilation to keep exposure levels below permissible limits.

RESPIRATORY PROTECTION (SPECIFY TYPE)

If exposure may exceed permissible limits, use a NIOSH-approved respirator for toxic dusts having a TLV not less than 0.05 mg/cu.m. Always observe respirator limitations.

EYE PROTECTION

Safety Glasses

GLOVES

None

OTHER PROTECTIVE CLOTHING AND EQUIPMENT

None

SECTION 8 - SPILL OR LEAK PROCEDURES

HAZARDOUS WASTE CLASSIFICATION (RCRA) - FEDERAL

TOXIC IGNITABLE CORROSIVE REACTIVE NOT CLASSIFIED

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED

Use normal clean-up procedures, using a broom or vacuum, taking care to avoid excessive dusting.

WASTE DISPOSAL METHOD

Dispose of in accordance with all applicable Federal, State, and Local regulations.

SECTION 9 - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE

None

OTHER PRECAUTIONS

None

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