

Material Safety Data Sheet - Morse Ferrous Cutting Tools

Section I - IDENTIFICATION

Emergency Phone Number - (800) 255-1701

Chemical Name - (Generic) Ferrous Alloys

Effective Date – 01/09

Trade Name - All Morse Ferrous Cutting Tool Products

Revised Date – 01/09

Common Name - High Speed, Tool & Die, Carbon and Stainless Steel

Section II - HAZARDOUS INGREDIENTS

The terms "hazardous" and "hazardous materials" as used within this MSDS should be interpreted as defined by, and in accordance with, the OSHA Hazard Communication Standard (29 CFR Part 1910, 1200) including cited Appendices, Lists, References, etc., all of which are hereby incorporated by reference.

Material	Percentage by Weight	CAS NO.		OSHA PEL		ACGIH TLV	
Cobalt	7740-48-4	0.0-12.5%		0.1 mg/m ³		0.1 mg/m ³	
Chromium	7440-47-3	0.0-18.0%		1.0 mg/m ³		0.5 mg/m ³	
Iron	1309-37-1	60.0-99.5%		10 mg/m ³		5 mg/m ³	
Manganese	7439-96-5	0.1-2.5%	(Dust) (Fume)	5 mg/m ³ --	(Ceiling)	5 mg/m ³ 1 mg/m ³	(Ceiling)
Molybdenum	7439-98-7	0.0-10.0%					
Nickel	7740-02-0	0.0-16.0%		1 mg/m ³		1 mg/m ³	
Vanadium	1314-62-1	0.0-6.0%	(Dust) (Fume)	0.5 mg/m ³ 0.1 mg/m ³	(Ceiling) (Ceiling)	0.05 mg/m ³ 0.05 mg/m ³	
Titanium	0.0-1.0	0.0-1.0%		15 mg/m ³		5 mg/m ³	
Carbon	1333-86-4	0.10%		3.5 mg/m ³	5	3.5 mg/m ³ (As Carbon Black)	
Tungsten	7440-33-7			--	-	5 mg/m ³	
Silicon	7440-21-2	0.0-3.5%	(Dust)	--	-	5.0 mg/m ³	
Aluminum	7429-90	0.0-2.0%	(Dust) (Fume)	--	-	5 mg/m ³	

Section III - PHYSICAL DATA

Boiling Point (°F) - 5000

Melting Point Approx. - 2500°F

Vapor Pressure - N/A
Specific Gravity (H₂O=1) - Approx. 7.8-8.2 (60°F)
Vapor Density (Air=1) - N/A
Evaporation Rate - N/A
Solubility in Water - Insoluble
Odor and Appearance - Solid Odorless Metal

Section IV - FIRE AND EXPLOSION HAZARD DATA

Flash Point - None
Fire Point - None

Section V - HEALTH HAZARD INFORMATION

WE DO NOT CONSIDER THIS PRODUCT IN THE FORM IT IS SOLD TO CONSTITUTE A PHYSICAL HAZARD OR A HEALTH HAZARD. SUBSEQUENT OPERATIONS SUCH AS ABRADING, MELTING, WELDING, CUTTING OR PROCESSING IN ANY OTHER FASHION MAY PRODUCE POTENTIALLY HAZARDOUS DUST OR FUME WHICH CAN BE INHALED, SWALLOWED, OR COME IN CONTACT WITH THE SKIN OR EYES.

PRIMARY ROUTES OF ENTRY:

Inhalation
Skin Contact
Eye Contact
Ingestion

FIRST AID PROCEDURES

Inhalation - Remove to fresh air, if condition continues, consult physician.

Skin Contact - Brush off excess dust. Wash area well with soap and water.

Eye Contact - Flush well with running water to remove particulate. Get medical attention.

Ingestion - Seek medical help if large quantities of material have been ingested. **MSDS - High Speed, Tool & Die, Carbon and Stainless Steels**

EFFECTS OF EXPOSURE: No toxic effects would be expected from exposure to the solid form of specialty steel. Prolonged, repeated exposure to fumes or dusts generated during heating, cutting brazing or welding may or may not cause adverse health effects associated with the listed constituents in excess of OSHA permissible exposure limits established in 29 CFR Subpart Z. (See Section II).

EXPOSURE LIMITS: Section II lists specific ingredients and permissible exposure limits.

IMPORTANT: ...Determine actual exposure by industrial hygiene monitoring.

POSSIBLE SIGNS AND SYMPTOMS OF EXPOSURE TO DUST, WELDING FUME AND GASES:

SHORT TERM EXPOSURE: Metallic taste; nausea, tightness of chest; fever; irritation of eyes, nose, throat and skin; loss of consciousness/death due to welding gases or lack of oxygen.

LONG TERM EXPOSURE: There are no adverse effects from the products in their solid form. Adverse effects may or may not result from long-term (chronic) exposure to dust, fume, gases, etc., that occur by way of subsequent operations on the product. Some studies would associate one (or more) of the constituents (per Section II) with the potential for neurologic, pulmonary, respiratory, skin, or other disease. Chromium, cobalt and nickel in various chemical compounds have been identified as suspect human carcinogens by the I.A.R.C., N.T.P. Annual Report. We believe there are no reliable scientific studies which show that workers exposed to operations upon our alloys suffer increased incidence of lung cancer or other disease because of their exposure to the forms of chromium, nickel or other elements in our products.

AGGRAVATION OF PRE-EXISTING RESPIRATORY OR ALLERGIC CONDITIONS MAY OCCUR IN SOME WORKERS.

Section VI - REACTIVITY DATA

Stability - Stable

Incompatibility - Reacts with Strong Acids to Generate Hydrogen Gas

Hazardous Decomposition Products - Metallic Oxides

Section VII - SPILL OR LEAK PROCEDURES

Steps to be Taken in Case Material is Released or Spilled - N/A

Waste Disposal Method - Dispose of in accordance with appropriate government regulations. May be sold as scrap for reclaim.

Section VIII - SPECIAL PROTECTION

Respiratory Protection - If fumes, misting or dust condition occurs and TLV as indicated in Section II is exceeded, provide NIOSH approved respirators.

Eye Protection - Safety glasses with side shields or goggles are recommended.

Protective Gloves - Protective gloves or Barrier cream are recommended when contact with dust or mist is likely. Prior to applying the Barrier cream or use of protective gloves, wash thoroughly.

Ventilation - Use local exhaust ventilation which is adequate to limit personal exposure to airborne dust to levels which do not exceed the PEL or TLV. If such equipment is not available use respirators as specified above.

Section IX - SPECIAL PRECAUTIONS

Precautions to be Taken in Handling and Storage: Use good housekeeping practices to prevent accumulations of dusts and to keep airborne dust concentrations at a

minimum.

Other Precautions: This material is potentially contaminated with coatings such as oils for preservatives and other contaminants. If the material is contaminated, special precautions (such as Process Control and personal protective equipment appropriate to the nature of the suspected contaminants) should be taken to avoid resulting exposures when handling, cutting (thermal or mechanical) and/or heating or melting.

In case of questions please call: William Hagen
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N/A: Not Applicable
N/E: Not Established
UN: Unavailable