



MATERIAL SAFETY DATA SHEET

SECTION 1 – PRODUCT DESCRIPTION - General Alloys

A tasteless, odorless, solid metal in the form of sheet, bar, plate tubing, strip, block and billet. The alloy identification or trade name is located on all shippers, invoices and packing slips accompanying this shipment. The percentage of each hazardous ingredient is listed on the certification accompanying all shipments

SECTION 2 – HAZARDOUS INGREDIENTS

COMPONENT ELEMENTS	CAS #	COMPONENT ELEMENTS	CAS #
Aluminum (Al)	7429-90-5	Manganese (Mn)	7439-96-5
Carbon (C)	7440-44-0	Molybdenum (Mo)	7439-98-7
Chromium (Cr)	7440-47-3	Nickel (Ni)	7440-02-0
Cobalt (Co)	7440-48-4	Selenium (Se)	7782-49-2
Columbium (Cb) or (Nb)	7440-03-1	Silicon (Si)	7440-21-3
Copper (Cu)	7440-50-8	Titanium (Ti)	7440-32-6
Iron (Fe)	7439-89-6	Tungsten (W)	7440-33-7
		Vanadium (V)	7440-62-2

SECTION III – PHYSICAL DATA

BOILING POINT: 686/5660 C **MELTING POINT:** 217/3410 C **VAPOR PRESSURE:** Nil specific **GRAVITY:** 1.8/19.3
SOLUBILITY IN WATER: Insoluble **APPEARANCE:** Solid **METAL ODOR:** Odorless

SECTION IV – FIRE AND EXPLOSION DATA

FLASH POINT: None **FIRE POINT:** None, the product is a non-combustible material

SECTION V – HEALTH HAZARD DATA

This product in the form that it is, solid, does not constitute a physical or health hazard. Welding, cutting, melting, grinding or any processing that causes a release of dust or fumes may cause some of the melting ingredients to change to a form which could affect exposed workers. Please refer to the original manufacturer, producing mill or a physical for the information indicating the symptoms and first aid requirements when using these materials

SECTION VI – REACTIVITY

Stability: Chemically stable hazardous decomposition products, metal oxides polymerization, will not occur.
Incompatibility: reacts with strong acids to generate hydrogen gas. Condition to avoid: dust and fume generating processing

SECTION VII – SPILL, LEAK OR DISPOSAL INFORMATION

This product is a solid metal and no potential for spillage or leakage. Material solids may be sold as scrape. Dust should be disposed of as required by federal, state and local regulations.

SECTION VIII – SPECIAL PROTECTION INFORMATION

Ventilation requirements: use general or local exhaust ventilation to keep airborne concentrations of dust and fumes below the TLV. **Personal protection equipment:** always consult a professional hygienist. **Respiratory protection:** if fumes, misting or dust conditions occur consult a professional hygienist. Provide NIOSH approved respirators. **Eye protection:** safety glasses should always be worn when grinding or cutting. Face shields should be worn with proper eye protection when welding or burning. **Gloves:** gloves and barrier creams may be necessary to prevent skin sensitization and dermatitis. **Other clothing or equipment:** as required and prescribed by a professional hygienist.

SECTION IX – EMERGENCY FIRST AID AND INFORMATION

If a cut or overexposure to fumes or dust occurs, move the victim to fresh air. Then seek professional medical assistance

SECTION X – ADDITIONAL INFORMATION

If you have any questions or need any additional information, please contact the producing mill or a professional metallurgist.