MATERIAL SAFETY DATA SHEET

Material Name: **Nickel Alloys** ID:

SECTION 1 – CHEMICAL PRODUCT AND COMPANY INFORMATION

Chemical Name: **Nickel Alloys**
Product Use:
Manufacturer Information:

OMNISOURCE CORPORATION
1610 North Calhoun Street
Fort Wayne, Indiana 46808

Telephone: (260)422-5541 Safety Department
Emergency #: 800-666-4789

SECTION 2 – COMPOSITION/INFORMATION ON INGREDIENTS

CAS #	Component	Percent
7440-02-0	** Nickel (Ni)	7-99.9
7439-89-6	Iron (Fe)	0-78
7441-50-8	*Copper (Cu)	0-68
7440-47-3	*Chromium (Cr)	0-48
7439-98-7	Molybdenum (Mo)	0-16
7440-48-4	*Cobalt (Co)	0-12.5
7440-03-1	Columbium (Cb)	0-5.3
7440-33-7	Tungsten (W)	0-4.5
7440-32-6	Titanium (Ti)	0-3
7429-90-5	**Aluminum (Al)	0-2.9
7439-96-5	*Manganese (Mn)	0-2
7440-25-7	Tantalum (Ta)	0-2
7440-21-3	Silicon (Si)	0-1.2
7440-62-2	**Vanadium (V)	0-0.15

Note: Those elements identified by an * and those elements capable of generating highly toxic fumes or dusts (identified by a **) are classified as toxic by EPA in 40 CFR 372.65 and subject to reporting requirements of SARA Title III Section 313 and 40 CFR 372.

SECTION 3 – HAZARD IDENTIFICATION

EMERGENCY OVERVIEW: Nickel alloys in their solid state present no inhalation, ingestion or contact health hazard. However, inhaling dusts, fumes or mists which may be generated during certain manufacturing procedures (burning, melting, welding, sawing, brazing, grinding, and machining) may be hazardous to your health. Dusts may also be irritating to the unprotected skin or eyes.

ACUTE EFFECTS: Excessive exposure to dusts/fumes may cause irritation of eyes, nose and throat, Inhalation of dusts/fumes may result in metal fumes fever (metallic taste in mouth, dryness and irritation of throat, chills and fever).

CHRONIC EFFECTS: Prolonged inhalation of fumes or dusts may caused a variety of adverse health effects to the respiratory system, including (but not necessarily limited to) lesions of the mucous membrane, bronchitis, pneumonia and cancers of the nasal cavity and respiratory tract.

POTENTIAL HEALTH EFFECTS/MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Any preexisting chronic respiratory condition (asthma, chronic bronchitis, emphysema).

ROUTES OF ENTRY: Inhalation (dust/fumes/mists), contact with skin and eyes (dust/mist), ingestion (dusts).

SECTION 4 – FIRST AID MEASURES

INHALATION: Immediately remove victim to fresh air. If condition persists, consult physician.

EYE CONTACT: Immediately flush with running water to remove particulates, consult physician.

SKIN CONTACT: If irritation develops, remove clothing and wash with soap and water. If condition persists, consult physician.

INGESTION: Consult physician.

NOTE TO PHYSICIAN: None.

SECTION 5 – FIRE FIGHTING MEASURES

FLASHPOINT: Nonflammable.
SPECIAL FIRE FIGHTING INSTRUCTION AND EQUIPMENT: None Required.
AUTOIGNITION TEMPERATURE: NA
FLAMABLE LIMITS: Nonflammable
HAZARDOUS COMBUSTION PRODUCTS: None.
EXTINGUISHING MEDIA: Use what is appropriate for surrounding fire.
UNUSUAL FIRE AND EXPLOSION HAZARDS: None know.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

CLEAN UP PROCEDURES: No special procedures needed.

SPECIALIZED EQUIPMENT: None.

SECTION 7 – HANDLING AND STORAGE

PRECAUTIONS TO BE TAKIN IN HANDLING: Minimize activities which may generate dusts, mists or fumes. Keep areas well ventilated. Use suitable equipment to move materials.

PRECAUTIONS TO BE TAKEN IN STORAGE: None required.

SECTION 8 – EXPOSURE CONTROLS, PERSONAL PROTECTION

RESPIRATORY PROTECTION: Wear NIOSH approved dust/mist/fume respirator when welding or burning this metal.

EYE/FACE PROTECTION: Face shields (welding or burning), safety glasses (cutting or grinding).

OTHER PROTECTIVE EQUIPMENT: Use appropriate protective clothing such as welding aprons and gloves when welding or burning.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Metal
ODOR: Odorless
PHYSICAL STATE: Solid
VAPOR PRESSURE: NA
BOLING POINT (C): NA
SOLUBILITY IN WATER: Insoluble
SPECIFIC GRAVITY(H20=1) 7.80-9.24

SECTION 10 – STABILITY AND REACTIVITY

STABILITY: Stable under normal storage conditions.
HAZARDOUS POLYMERIZATION: Will not occur.
CONDITIONS TO AVOID: None.
HAZARDOUS DECOMPOSITION PRODUCTS (when heated): None.
MATERIALS TO AVOID: Strong acids (such as sulfuric, hydrochloric, nitric)/oxidizing agents.

SECTION 11 – TOXICOLOGY INFORMATION

LETHAL CONCENTRATION (LC50): None established.
REPRODUCTIVE EFFECTS: NA
LETHAL DOSE (LD50): NA
MUTAGENICITY: NA
TERATOGENICITY: NA
CARCINOGENIC BY NTP, IARC OR OSHA: No. (Note: fumes/dusts/mists from this material may be carcinogenic if inhaled over long periods of time).

SECTION 12 – ECOLOGICAL INFORMATION

No adverse ecological effects are expected.

SECTION 13- DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: Recycle scrap materials through scrap dealers and brokers. Dispose of used non-cyclable materials in accordance with local, state and federal regulations.

SECTION 14 – TRANSPORT INFORMATION

No special DOT regulations pertaining to this material.

SECTION 15 – REGULATORY INFORMATION

SARA: Some components of this product are classified as toxic by the EPA in 40 CFR 372.65 and subject to reporting requirements of SARA Title III § 313 and CFR 372.45.

SECTION 16 – OTHER INFORMATION

OTHER PRECAUTIONS: Take appropriate precautions when moving or shipping this material to prevent injury to personnel handling it.

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