

MATERIAL SAFETY DATA SHEET

SECTION I

REVIEWED: August 10, 2009

NAME: ROLLED ALLOYS, INC.
ADDRESS: 125 WEST STERNS ROAD, TEMPERANCE, MICHIGAN 48182

EMERGENCY TELEPHONE NO.: (734) 847-0561**PRODUCT IDENTIFICATION:**

STAINLESS STEEL, NICKEL, COBALT AND TITANIUM BASED ALLOYS.

SECTION II - CHEMICAL COMPONENTS

| CHEMICAL COMPONENTS | C.A.S. NO. | RANGE % | TLV(UNITS) | OSHA PEL |
|---------------------------------------|------------|---------|------------------------|-----------------------|
| NICKEL | 7440-02-0 | 0-99 | 1.5 mg/m ³ | 1 mg/m ³ |
| IRON (LIMITS FOR IRON OXIDE FUMES) | 1309-37-1 | 0-89 | 5 mg/m ³ | 10 mg/m ³ |
| CHROMIUM | 7440-47-3 | 0-33 | 0.5 mg/m ³ | 1 mg/m ³ |
| MANGANESE (LIMITS FOR DUST) | 7439-96-5 | 0-16 | 5 mg/m ³ | 5 mg/m ³ |
| (LIMITS FOR FUMES) | | | 1 mg/m ³ | N. LISTED |
| MOLYBDENUM | 7439-98-7 | 0-30 | 5 mg/m ³ | 0.1 mg/m ³ |
| COPPER (LIMITS FOR FUMES) | 7440-50-8 | 0-34 | 0.2 mg/m ³ | 0.1 mg/m ³ |
| SILICON (LIMITS FOR DUST) | 7440-21-3 | 0-4 | 10 mg/m ³ | 15 mg/m ³ |
| TUNGSTEN | 7440-33-7 | 0-5 | 5 mg/m ³ | N. LISTED |
| ALUMINUM (LIMITS FOR DUST) | 7429-90-5 | 0-2 | 10 mg/m ³ | 15 mg/m ³ |
| (LIMITS FOR WELDING FUMES) | | | 5 mg/m ³ | N. LISTED |
| COLUMBIUM (NIOBIUM) (LIMITS FOR DUST) | 7440-03-1 | 0-6 | 10 mg/m ³ | 15 mg/m ³ |
| COBALT | 7440-48-4 | 0-66 | 0.02 mg/m ³ | 0.1 mg/m ³ |
| TITANIUM | 7440-32-6 | 0-90 | 10 mg/m ³ | 15 mg/m ³ |

SECTION III - PHYSICAL DATA

BOILING POINT (F.) - N/A
 VAPOR PRESSURE (MM HG.) - N/A
 VAPOR DENSITY (AIR = 1) - N/A
 SOLUBILITY IN WATER - N/A
 APPEARANCE & ODOR - METALLIC AND ODORLESS SOLID

SPECIFIC GRAVITY (H₂O-1) - 8
 PERCENT VOLATILE BY VOLUME (%) - N/A
 EVAPORATION RATE - N/A
 MELTING POINT 2375°F – 3020°F

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (METHOD USED) - N/A
 SPECIAL FIRE FIGHTING PROCEDURES - N/A

FLAMMABLE LIMITS - N/A
 UNUSUAL FIRE EXPLOSION HAZARDS - N/A

EXTINGUISHING MEDIA - N/A

SECTION V - HEALTH HAZARD DATA

(X) MAJOR EXPOSURE HAZARD: INHALATION (X) SKIN CONTACT () SKIN ABSORPTION () INGESTION ()

NOTE: Steel products in the natural state do not present an inhalation, injection, or contact hazard. However, operations such as burning, welding, sawing, brazing, or grinding may result in the following effects if exposures exceed permissible limits:

SYMPTOMS: ACUTE: Excessive inhalation of fumes from many metals can produce an acute reaction known as "metal fume fever". Symptoms consist of chills and fever (very similar to and easily confused with flue symptoms) which come on a few hours after exposure. Dermatitis due to sensitization may occur in some individuals.

CHRONIC: Excessive and repeated overexposure of nickel and chromium can cause various forms of dermatitis, inflammation and/or ulceration of upper respiratory tract. Both chromium and nickel have been associated with upper respiratory cancer. Excessive and repeated over exposure of iron fumes can cause siderosis. Excessive and prolonged inhalation of manganese fumes can cause bronchitis, pneumonitis, lack of coordination. Copper - pulmonary effects. Excessive and prolonged overexposure of cobalt may cause an asthma-like disease with cough and dyspnea.

EMERGENCY FIRST AID AND PROCEDURES: In case of excessive exposure, remove to fresh air and seek a physician's assistance.

SECTION VI - REACTIVITY DATA

STABLE (X) UNSTABLE () CONDITIONS TO AVOID - N/A INCOMPATIBILITY (MATERIALS TO AVOID) - N/A
 DECOMPOSITION PRODUCTS - N/A **HAZARDOUS POLYMERIZATION:** MAY OCCUR () WILL NOT OCCUR (X)
 CONDITIONS TO AVOID - N/A

SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED - N/A
 PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE - N/A

WASTE DISPOSAL METHOD - N/A

SECTION VIII - PERSONNEL PROTECTION INFORMATION

RESPIRATORY PROTECTION: For welding, burning, grinding and cutting operations, local exhaust ventilation should be provided. If fumes or dust cannot be controlled with exhaust ventilation, an appropriate NIOSH-approved respirator should be used to prevent excessive inhalation exposure.

GLOVES: Gloves may be necessary to prevent skin sensitization and dermatitis.

EYE PROTECTION: Approved safety glasses or goggles should be worn when working with dust metals.

PREPARED BY: ROLLED ALLOYS, INC.

WHILE THE INFORMATION AND RECOMMENDATIONS SET FORTH ON THIS SHEET ARE BELIEVED TO BE ACCURATE AS OF THE PRESENT DATE, THE COMPANY MAKES NO REPRESENTATION OR WARRANTY WITH RESPECT THERETO AND DISCLAIMS ALL LIABILITY FROM RELIANCE THEREON.

N. LISTED = NONE LISTED, N/A = NOT APPLICABLE, UN = UNKNOWN