



Hummel Croton Inc.
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MSDS



Zirconium Nickel Alloy 70/30

*In case of Emergency Call Chemtrec®
(U.S.) (800)-424-9300
(International) (703)-527-3887*

Section I. Chemical Product and Company Identification

Supplier:

Hummel Croton Inc.
10 Harmich Road
South Plainfield, NJ 07080
(908)-754-1800

Chemical Name: Zirconium Nickel Alloy 70/30

Synonym: ZrNi 70/30

CAS Number: Zirconium 7440-67-7 Nickel 7440-02-0

Chemical Formula: Not Applicable

HMIS Rating

Health	1
Flammability	3
Reactivity	1

Personal Protection E

Section II. Composition and Information on Ingredients

Material	CAS#	%	OSHA	ACGIH
Zirconium	7440-67-7	70%	5mg/m ³ as Zr	5mg/m ³ as Zr
Nickel	7440-02-0	30%	1mg/m ³ as Ni	1mg/m ³ as Ni
Chromium Compounds	Proprietary	0.5%	0.5mg/m ³ as Cr	0.5mg/m ³ as Cr

Section III Hazards Identification:

Accute Health Effects: Nickel dusts can cause skin irritation and sensitization ("Nickel Itch"), which is characterized by burning, itching, and skin eruptions. All airborne Nickel dusts should be regarded as carcinogenic. Inhalation will cause irritation to the lungs and mucus membrane. Irritation to the eyes will cause watering and redness. Reddening, scaling, and itching are characteristics of skin inflammation. Follow safe industrial hygiene practices and always wear protective equipment when handling this compound.

Chronic Health Effects: Repeated or prolong exposure to Nickel can affect the heart, liver, kidneys, and central nervous system. Repeated and prolong exposure to chromium compounds can result in pulmonary and dermal sensitization, pulmonary fibrosis, and kidney and liver damage.

Accute Health Effects: Because of the Nickel and the Chromium compound this product is listed as a carcinogen. See actual reports (IARC, NTP & ACGIH) for Nickel and Chromium compounds.

Section IV. First Aid Measures

First Aid For Eye: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Call a physician.

First Aid For Skin: In case of contact, flush skin with water. Wash clothing before reuse. Call a physician if irritation occurs.

First Aid For Inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

Call a physician.

First Aid For Ingestion: If swallowed, call a physician immediately.

Section V. Fire and Explosion Data

Flammability: Non-Flamable

Flash Points: Not Applicable

Auto-Ignition: 225°C

Flammable Limits: Not Applicable

Extinguishing Media: Use dry chemical (Dolomite-powdered limestone). Do not use water, carbon dioxide or halocarbon extinguishers.

Fire Fighting Procedure: Fire fighters and others who may be exposed to the products of combustion should be equipped with NIOSH approved positive pressure self-contained breathing apparatus (SCBA) and full protective clothing.

Fire/Explosion Hazards: FLAMMABLE SOLID! Small fires isolate and contain with dolomite and allow to burn. Large fires contain and smother with dolomite. CAUTION! Fire may reignite after having been extinguished.

Section VI. Accidental Release Measures

Spill Or Leak Procedures: Utilize recommended protective clothing and equipment. Clean spills in a manner that does not disperse dust into the air. Spill area can be washed with water. Collect wash water for approved disposal. Keep from entering water or ground water

Section VII. Handling and Storage

Storage Temperatures: Store at ambient temperature

Shelf Life: Unlimited in tightly closed container.

Special Sensitivity: None

Handling/Storage Precautions: Avoid breathing dust. Avoid getting in eyes or on skin. Wash thoroughly after handling. Store in a dry place away from direct sunlight, heat and incompatible materials (see Section X). Reseal containers immediately after use. Store away from food and beverages.

Section VIII. Exposure Controls/Personal Protection

Eye Protection: Safety glasses or goggles.

Skin Protection: PVC gloves with impervious boots, apron or coveralls. Employees should wash their hands and face before eating, drinking or using tobacco products.

Respirator: Work ambient concentrations should be monitored and if the recommended exposure limit is exceeded, a NIOSH/MSHA approved dust respirator must be worn.

Ventilation: Use local ventilation if dusting is a problem, to maintain air levels below the recommended exposure limit.

Additional Protective Measures: Emergency showers and eye wash stations should be available. Educate and train employees in the safe use and handling of hazardous chemicals.

Section IX. Physical and Chemical Properties

Physical Form: Fine Powder

Color: Grey

Odor: Odorless

Molecular Weight: Not Applicable

Boiling Point: Not Established

Melting/Freezing Point: Not Established

Solubility In Water: Insoluble

Specific Gravity: 7.21

Section X. Stability And Reactivity

Stability: Stable

Hazardous Polymerization: Will Not occur

Incompatibilities: Oxidizing agents, acids and halogenated hydrocarbons

Instable Conditions: Excessive temperatures (see Incompatibilities).

Decomposition Temperature: Not Established

Decomposition products: Unknown

Section XI. Toxicological Information

RTECS Number: Zirconium ZH7070000 Nickel QR 5950000

Routes of Exposure: Eye contact. Ingestion. Inhalation. Skin contact.

Toxicity Data: See Individual data for Zirconium and Nickel

Chronic Toxic Effects: Repeated or prolonged exposure to Nickel can affect the heart, liver, kidneys, and central nervous system. Repeated and prolonged exposure to chromium compounds can result in pulmonary and dermal sensitization, pulmonary fibrosis, and kidney and liver damage.

Acute Toxic Effects: Nickel dusts can cause skin irritation and sensitization ("Nickel Itch"), which is characterized by burning, itching, and skin eruptions. All airborne Nickel dusts should be regarded as carcinogenic. Inhalation will cause irritation to the lungs and mucus membrane. Irritation to the eyes will cause watering and redness. Reddening, scaling, and itching are characteristics of skin inflammation. Follow safe industrial hygiene practices and always wear protective equipment when handling this compound.

Section XII. Ecological Information

Ecotoxicity: Not available at this time.

Section XIII. Disposal Considerations

Waste Disposal Method: Waste disposal should be in accordance with existing federal, state and local environmental regulations.

Section XIV. Transportation Information

Proper Shipping Name: Metal Powders, Flammable, N.O.S. (Zirconium Nickel Alloy 70/30)

UN Number: 3089

Class: 4.1

P.G.: II

Label Code: 4.1

Section XV. Regulatory Information

OSHA Status: This product is hazardous under the criteria of the Federal OSHA Hazard Communication Standard 29 CFR 1910.1200.

TSCA Chemical Inventory: This compound is on the EPA Toxic Substance Control Act (TSCA) inventory List

California Proposition 65: To the best of our knowledge, this product contains no levels of listed substances, which the state of California has found to cause cancer, birth defects or other reproductive effects.

SARA 313 Title III:

Section 302 Extremely Hazardous Substances: None

Section 311/312 Hazardous Categories: None

Section 313 Toxic Chemicals: None

Section XVI. Other Information

Prepared By: Mark Dugan

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