

SAFETY DATA SHEET (SDS)

Revised: July 2023

SECTION 1 – IDENTIFICATION

Trade Name: Vulcan T-965-X
Emergency Telephone. No: (989)739-8050

Manufacturer: Vulcan Systems, LLC
 5740 F-41, Oscoda, MI 48750

SECTION 2 – HAZARDOUS IDENTIFICATION**Classification of the mixture:**

The product is placed on the market in solid form

Signal word (GHS-US): Danger

Classification in accordance with GHS-US

Skin Sens. 1 H317
 Carc. 1B H350
 STOT RE 1 H372

Label elements:

GHS-US labeling

Hazard Pictograms (GHS-US):



GHS07



GHS08

Hazard statements (GHS-US):

H317 May cause an allergic skin reaction
H350 May cause cancer
H372 Causes damage to organs through prolonged or repeated exposure

Precautionary statements:

P201 Obtain special instructions before use
P202 Do not handle until all safety precautions have been read and understood.
P260 Do not breathe dust/fume/gas/mist/vapours/spray
P261 Avoid breathing dust/fume/gas/mist/vapours/spray
P264 Wash thoroughly after handling
P270 Do not eat, drink or smoke when using this product.
P272 Contaminated work clothing should not be allowed out of the workplace
P280 Wear protective gloves/protective clothing/eye protection/face protection.

P302+P352 IF ON SKIN: Wash with plenty of soap and water
P308+P313 If exposed or concerned: Get medical advice/attention.
P314 Get medical advice and attention if you feel unwell
P321 Specific treatment (see label)
P333+P313 If skin irritation or a rash occurs: Get medical advice/attention
P362+P364 Take off contaminated clothing and wash before reuse
P405 Store locked up
P501 Dispose of contents and container in accordance with local/regional/national/international regulations.

SECTION 3 – COMPOSITION AND INFORMATION ON INGREDIENTS

This information is protected by Trade-Secret

SECTION 4 – FIRST AID PROCEDURES

If overcome by smoke or fumes, remove the victim to fresh air and call for medical aid. Employ first aid techniques recommended by the Red Cross.

SECTION 5 – FIRE-FIGHTING MEASURES

Non-flammable. Welding arc and sparks can ignite combustible and flammable products. Refer to the Canadian standard "Safety in Welding and Cutting and Allied Procedures" for fire prevention and protection information during the use of welding and allied procedure. **Extinguishing Media** – Co2 or Dry Chemical Extinguisher.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Not Applicable as product cannot leak or be spilled.

SECTION 7 – HANDLING AND STORAGE

Read and understand manufacturer's instructions and the precautionary label on the product. See American National Standard z249.1 "Safety in Welding and Cutting" published by the American Welding Society. Maintain all exposure below the limits in section 5. Monitor the air to ensure that the levels are below the above mentioned limits. See AWS f1.1 "Methods for Sampling Airborne Particles Generated by Welding and Allied Procedures" and AWS f1.3 "Evaluating Constituents in the Welding Environment: A Sampling Strategy Guide."

Prevent waste from contaminating the surrounding environment, discard any product, residue, disposable container or liner in an environmentally acceptable manner, in full compliance with federal, and local regulations.

SECTION 8 – EXPOSURE CONTROL/PERSONAL PROTECTION

This section covers the material from which this product is manufactured. The term "hazardous ingredients" should be interpreted as a term required and defined in OSHA hazard communication standard. This product contains toxic chemicals subject to the reporting requirements of section 313 of title III of SARA and CFR part 372.

Ingredients:

Substance Name		Product Identifier (CAS No)	% Percent	GHS-US Classification
Nickel	Ni	7440-02-0	0.2 - 3.75	Skin Sens. 1, H317 Carc. 1B, H350 STOT RE 1, H372
Chromium	Cr	7440-47-3	<= 10.5	Not classified
Molybdenum	Mo	7439-98-7	<= 1.2	Not classified
Manganese	Mn	7439-96-5	0.4 - 2.1	Not classified
Silicon	Si	7440-21-3	0.15 - 0.8	Not classified
Copper	Cu	7440-50-8	0.25 - 0.5	Not classified
Vanadium pentoxide	V	1314-62-1	0.03 - 0.25	Not classified

Ingredients:

Nickel (CAS No) 7440-02-0		
USA ACGIH	ACGIH TWA (mg/m ³)	1.5 mg/m ³
USA OSHA	OSHA PEL (TWA) (mg/m ³)	1 mg/m ³
Chromium (CAS No) 7440-47-3		
USA ACGIH	ACGIH TWA (mg/m ³)	0.5 mg/m ³
USA OSHA	OSHA PEL (TWA) (mg/m ³)	1 mg/m ³
Copper (CAS No) 7440-50-8		
USA ACGIH	ACGIH TWA (mg/m ³)	0.2 mg/m ³
USA OSHA	OSHA PEL (TWA) (mg/m ³)	1 mg/m ³
Vanadium pentoxide (CAS No) 1314-62-1		
USA ACGIH	ACGIH TWA (mg/m ³)	0.05 mg/m ³
Manganese (CAS No) 7439-96-5		
USA ACGIH	ACGIH TWA (mg/m ³)	0.1 mg/m ³
USA OSHA	OSHA PEL (Ceiling) (mg/m ³)	5 mg/m ³
Molybdenum (CAS No) 7439-98-7		
USA ACGIH	ACGIH TWA (mg/m ³)	3 mg/m ³
Silicon (CAS No) 7440-21-3		
USA OSHA	OSHA PEL (TWA) (mg/m ³)	5 mg/m ³

Welding fumes cannot be classified simply. The composition and quantity of both are dependent on the metal being welded, the process, procedures, and alloys used. Other conditions which also influence the composition and quality of the fumes and gases to which workers may be exposed include coating on the metal being welded (such as paint, plating, or galvanizing), the number of welders, the volume of the work area, the quality and amount of ventilation, the position of the welder's head with respect to the fume plume, and presence of contaminants in the atmosphere (ie, chlorinated hydrocarbon vapors from cleaning & degreasing activities). When the tig wire is consumed, the fume and gas decomposition products generated are different in percent and form from the ingredients listed in the tig wire. Decomposition products of normal operation include those originating from the volatilization, reaction, or oxidation of the materials in the tig wire, plus those from the base metal and coating, etc.

The international agency for research on cancer (IARC) has indicated that nickel and certain nickel compounds are probably carcinogenic for humans, but that the specified compounds which may be carcinogenic cannot be specified precisely. Chromium has also been listed by IARC because of "sufficient evidence for the carcinogenicity of chromium and certain chromium compounds." The studies forming the basis for the conclusion were from operations different from the production or welding of nickel and chromium alloys. Recent studies of workers melting and working alloys containing nickel/chromium have found increased risk of cancer.

Use enough ventilation, local exhaust at the arc, or both, to keep the fumes and gases below TLVs (threshold limit values) in the workers' breathing zone and the general area. Train the welder to keep his head out of the fumes. Use respirable fume respirator or air supplied respirator when welding in confined space or where local exhaust or ventilation does not keep exposure below the TLV.

Wear helmet or use a face shield with filter lens. Wear hand, head, and body protection, which help to prevent injury from radiation, sparks, and electrical shock. Train the welder not to touch live electrical parts and insulate himself from work and ground.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Appearance	N/A	Upper/lower flammability or exposure limits	N/A
Odor	N/A	Vapor Pressure	N/A
Odor threshold	N/A	Vapor density	N/A
pH	N/A	Relative Density	N/A
Melting point/freezing point	N/A	Solubility	N/A
Initial boiling point and boiling range	N/A	Flash point	N/A
Evaporation rate	N/A	Flammability	N/A
Partition coefficient	N/A	Auto-ignition temperature	N/A
Decomposition temperature	N/A	Viscosity	N/A

SECTION 10 – STABILITY AND REACTIVITY

Chemical Stability: The product is stable under normal conditions. When using it may produce dangerous fumes and gases.

Hazardous Decomposition: The composition and quantity of welding fumes generated are dependent upon several variables including the base material, base material contaminants and/or coatings (paint, galvanized, etc.) welding process utilized. Other factors that will effect the quantity of fumes available for inhalation are the number of welding operators in a designated work area, the quality of ventilation, the position of the operator with respect to the fume plume, as well as the presence of contaminants in the atmosphere from other manufacturing operations. Reasonably expected fume constituents of this product would include: complex oxides of iron, manganese, silicon, chromium, nickel, molybdenum, calcium, magnesium, and titanium. No hazard exists until this product is used in welding.

SECTION 11 – TOXICOLOGICAL INFORMATION

Acute toxicity: Harmful if swallowed.

Skin sensitisation: May cause an allergic skin reaction

SECTION 12 – ECOLOGICAL INFORMATION

No environmental data available.

SECTION 13 – DISPOSAL CONSIDERATIONS

Dispose of in accordance with local, state, and federal regulations.

SECTION 14 – TRANSPORTATION INFORMATION

Special shipping considerations for this product are limited to those necessary to prevent damaging the product.

SECTION 15 – REGULATORY INFORMATION**Federal Regulations:**

Nickel	(CAS No) 7440-02-0
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Listed on SARA Section 313 (Specific toxic chemical listings)	
SARA Section 313 - Emission Reporting	0.1%
Chromium	(CAS No) 7440-47-3
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Listed on SARA Section 313 (Specific toxic chemical listings)	
SARA Section 313 - Emission Reporting	1.0%
Copper	(CAS No) 7440-50-8
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Listed on SARA Section 313 (Specific toxic chemical listings)	
SARA Section 313 - Emission Reporting	1.0%

Vanadium pentoxide	(CAS No) 1314-62-1
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Listed on SARA Section 302 (Specific toxic chemical listings)	
SARA Section 302 - Threshold Planning Quantity (TPQ)	<=10000
Manganese	(CAS No) 7439-96-5
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Listed on SARA Section 313 (Specific toxic chemical listings)	
SARA Section 313 - Emission Reporting	1.0%
Molybdenum	(CAS No) 7439-98-7
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Silicon	(CAS No) 7440-21-3
Listed on the United States TSCA (Toxic Substances Control Act) inventory	

SECTION 16 – OTHER INFORMATION**Full text of H-phrases:**

Carc. 1B	Carcinogenicity, Category 1B
Skin Sens. 1	Sensitisation — Skin, category 1
STOT RE 1	Specific target organ toxicity — Repeated exposure, Category 1
H317	May cause an allergic skin reaction
H350	May cause cancer
H372	Causes damage to organs through prolonged or repeated exposure

NFPA health hazard: 1 - Exposure could cause irritation but only minor residual injury even if no treatment is given.

NFPA fire hazard: 0 - Materials that will not burn.

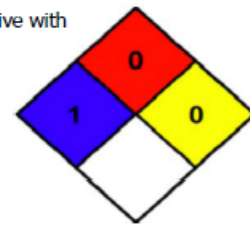
NFPA reactivity: 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.

HMIS III Rating

Health: 2 Moderate Hazard - Temporary or minor injury may occur

Flammability: 0 Minimal Hazard

Physical: 0 Minimal Hazard



Vulcan Systems, LLC, believes this data to be accurate, but no warranty, expressed or implied, is made.