

SAFETY DATA SHEET (SDS)

Revised: May 2017

SECTION 1 – IDENTIFICATION

Trade Name: Vulcan T-930-HS **Manufacturer:** Vulcan Systems, LLC
Emergency Telephone. No: (989)739-8050 5740 F-41, Oscoda, MI 48750

SECTION 2 – HAZARDOUS IDENTIFICATION

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS):

Health, Skin corrosion/irritation, 1
 Health, Specific target organ toxicity - Single exposure, 3
 Health, Carcinogenicity, 1
 Health, Specific target organ toxicity - Repeated exposure, 2

GHS Label elements, including precautionary statements:

GHS Signal Word: **DANGER**

GHS Hazard Pictograms:



GHS Hazard Statements:

H314 - Causes severe skin burns and eye damage
 H335 - May cause respiratory irritation
 H350 - May cause cancer
 H373 - May cause damage to organs through prolonged or repeated exposure
 CGA-HG11 - SYMPTOMS MAY BE DELAYED.

GHS Precautionary Statements:

P232 - Protect from moisture.
 P261 - Avoid breathing dust/fume/gas/mist/vapors/spray.
 P271 - Use only outdoors or in a well-ventilated area.
 P280 - Wear protective gloves/protective clothing/eye protection/face protection.
 CGA-PG27 - Read and follow the Safety Data Sheet (SOS) before use.

Hazards not otherwise classified (HNOC) or not covered by GHS:

Route of Entry: Eyes; Skin

Target Organs: Throat; Nose, Respiratory system

Inhalation: Short term overexposure to welding fumes may result in discomfort such as: dizziness, nausea, or dryness or irritation of the nose, throat, lungs, and/or eyes.

Acute Effects: Irritating to the nose, throat and respiratory tract.

Chronic Toxicity: Chronic overexposure to welding fumes can result in: Chronic respiratory problems, iron build-up in the lungs, bone erosion, reduced pulmonary functions and nervous disorders.

Eye Contact: Fumes may be moderately irritating to the eyes. The bright light produced by the arc can damage the eyes.

SECTION 3 – COMPOSITION AND INFORMATION ON INGREDIENTS

Ingredients:

Cas#	%	Chemical Name
7782-42-5	0-0.35%	Carbon aka Graphite
7439-96-5	0.05-1.6%	Manganese compounds and fumes (as Mn)
7440-21-3	0.05-1.6%	Silicon
7440-47-3	0.05-13.5%	Chromium
7440-02-0	0.05-19%	Nickel, metallic and alloys
7439-98-7	0.005-5.5%	Molybdenum: soluble and insoluble compounds
7440-33-7	0.005-10%	Tungsten Metal Powder
1314-62-1	0.005-2.2%	Vanadium, pentoxide dust and fume
7439-89-6	46.1-99.785%	Iron
7440-32-6	0-0.15%	Titanium

EXPOSURE LIMITS

<u>CHEMICAL NAME</u>	<u>OSHA PEL</u>	<u>ACGIH TLV</u>
Carbon aka Graphite	15 mg/m3 TWA	10 mg/m3
Manganese compounds	5 mg/m3	1 mg/m3
Silicon	10 mg/m3* = Total dust, <=Respirable fraction	10 mg/m3 Total Dust
Chromium	1 mg/m3	0.5 mg/m3
Nickel Metal	1 mg/m3	1.5 mg/m3
Soluble compounds, as Mo	15 mg/m3	10 mg/m3
Tungsten	5 mg/m3 TWA, 10mg/m3 STEL	5 mg/m3 TWA, 10 mg/m3 STEL (inhalable)
Vanadium	0.05 mg/m3 TWA	1 mg/m3 TWA
Iron	10 mg/m3 TWA (Total Dust)	10 mg/m3 TWA (particles)
Titanium	10 mg/m3 NL = Not Listed	10 mg/m3

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

Store in a dry area.

SECTION 8 – EXPOSURE CONTROL/PERSONAL PROTECTION**PERSONAL PROTECTION**

EYES AND FACE: S39 - Wear eye/face protection
RESPIRATORY: Use sufficient ventilation, local exhaust at the arc, or both to keep the fumes and gases below TLV's in the workers breathing zone. In confined spaces use respirable fume respirator or air-supplied respirator.
PROTECTIVE CLOTHING: The intensity of the arc and the sparks emitted from it can cause severe burns. All skin should be covered

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Physical State: The welding consumable discussed herein is composed of a wire strip or solid wire rod with or without a flux based core or outer coating.

SECTION 10 – STABILITY AND REACTIVITY

Not Applicable

SECTION 11 – TOXICOLOGICAL INFORMATION

Not Applicable

SECTION 12 – ECOLOGICAL INFORMATION

Not Applicable

SECTION 13 – DISPOSAL CONSIDERATIONS

Not Applicable

SECTION 14 – TRANSPORTATION INFORMATION

Not Applicable

SECTION 15 – REGULATORY INFORMATION

Component (CAS#) [%] - CODES

Manganese compounds and fumes (as Mn) (7439-96-5) [0.05-1.6%] MASS, NJHS, OSHAWAC, PA, SARA313, TSCA, TXAIR

Silicon (7440-21-3) [0.05-1.6%] MASS, OSHAWAC, PA, TSCA, TXAIR

RQ(5000LBS), Chromium (7440-47-3) [0.05-13.5%] CERCLA, EPCRAWPC, HWRORA, MASS, NJHS, NRC, OSHAWAC, PA, PRIPOL, SARA313, TOXICPOL, TSCA, TXAIR

RQ(100LBS), Nickel, metallic and alloys (7440-02-0) [0.05-19%] CERCLA, EPCRAWPC, MASS, NJHS, NRC, OSHAWAC, PA, PRIPOL, SARA313, TOXICPOL, TSCA

Molybdenum: soluble and insoluble compounds (7439-98-7) [0.005-5.5%] MASS, OSHAWAC, PA, TSCA, TXAIR

Tungsten Metal Powder (7440-33-7) [0.005-10%] MASS, OSHAWAC, PA, TSCA, TXAIR

RQ(1000LBS), Vanadium, pentoxide dust and fume (1314-62-1) [0.005-2.2%] ACUTERCRA, CERCLA, CSWHS, EHS302, MASS, NJHS, OSHAWAC, PA, TSCA, TXAIR, TXHWL

Iron (7439-89-6) [46.1-99.785%] TSCA

Regulatory CODE Descriptions

RQ = Reportable Quantity
 MASS = MA Massachusetts Hazardous Substances List
 NJHS = NJ Right-to-Know Hazardous Substances
 OSHAWAC = OSHA Workplace Air Contaminants
 PA = PA Right-To-Know List of Hazardous Substances
 SARA313 = SARA 313 Title III Toxic Chemicals
 TSCA = Toxic Substances Control Act
 TXAIR = TX Air Contaminants with Health Effects Screening Level
 CERCLA = Superfund clean up substance
 EPCRAWPC = EPCRA Water Priority Chemicals
 HWRORA = RCRA Hazardous Wastes
 NRC = Nationally Recognized Carcinogens
 PRIPOL = Clean Water Act Priority Pollutants
 TOXICPOL = Clean Water Act Toxic Pollutants
 ACUTERCRA = RCRA Acute Hazardous Wastes (P-List)
 CSWHS = Clean Water Act Hazardous substances
 EHS302 = Extremely Hazardous Substance
 TXHWL = TX Hazardous Waste List

SECTION 16 – OTHER INFORMATION

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