MIDWEST INDUSTRIAL TOOL GRINDING, INC.
125 Main Street N
Hutchinson, MN 55350
320-455-0535 – Phone
320-455- 0805 – Fax
www.mitgi.us

A letter to our valued customers,

We are pleased to have you as a customer of MITGI. We want to ensure that you have the most current safety information about our products available to you and for your use. The information following this cover letter is our most recent revision of our Safety Data Sheet (SDS) for the steel cutting tools we manufacture. It is designed to comply with the Occupation Safety and Health Administration Hazard Communication Standard 29 CFR 1910.1200. The SDS has been compiled from information supplied to us by our current vendors for the steel grades that we currently stock and use for production of our products. Information about special application grades is available upon request.

We at MITGI strongly encourage our customers to carefully review the information provided in the SDS in its entirety. This includes Section 16: Other Information which includes information regarding User Responsibilities and Disclaimer Limitations.

Please contact us if you have any questions concerning the safe use of our products.

Kind Regards,

Safety Committee
MITGI

MITGI™

MIDWEST INDUSTRIAL TOOL GRINDING, INC.

Created Date: December 6, 2023

Reviewed Date: December 30, 2024

Safety Data Sheet: Solid Steel Cutting Tools
Solid Steel Blanks

SECTION 1: IDENTIFICATION OF PRODUCT AND COMPANY

Product Identifier/Trade Name: High Speed Steel, Double Six (M2), 6-6, Dynamax

Synonyms:

Chemical Family:

Identified Uses: Production of steel is used to produce steel cutting tools/manufacturing. Metal working.

Restrictions for Product Use: Cutting, sharpening or grinding of hard-metal tools may produce dusts of hazardous substances. These may be inhaled, ingested or come into contact with the skin if proper exposure controls (ventilation, dust/mist collection, personal protection equipment) are not used.

Appearance: Solid product

Uses Advised Against: N/A

Supplier of SDS:

Midwest Industrial Tool Grinding, Inc.
125 Main Street N
Hutchinson, MN 55350
(320) 455-0535 – Phone / (320) 455-0805 – Fax
Emergency Phone – (320) 455-9746 (*not staffed 24/7*)

www.mitgi.us

SECTION 2: HAZARD IDENTIFICATION

OSHA Regulatory Status: Chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard – 29 CFR 1910.1200

Physical Hazards	Category
Substances/Mixtures, when in contact with water, can emit flammable gases	1

Health Hazards	Category
Respiratory	1
Skin	1
Eye Irritant	
Reproductive Toxicity	
Carcinogenicity	1A
Combustible Dust	
STOT (Specific Target Organ Toxicity) Single Exp.	
STOT (Specific Target Organ Toxicity) Repeated Exposure	
Acute Toxicity	
Aquatic Acute	
Aquatic Chronic	

Environmental Hazards	Category
Long-term Aquatic Hazard	

Labeling Elements

Hazard-determining components of labeling: Cobalt, Arsenic and Nickel

Hazard Pictograms:

DANGER: The intended use(s) of the product(s) may include: cutting, grinding, welding and other miscelllaneous industrial operations that could burn or alter the solid structure of the product(s) as provided; can release hazardous metallic particles in the form of: powders, dust, mist, vapors or fumes and may be flammable. The hazards listed are applicable to the industrial machining and processing operations of these products. Handling of the the product(s) may cause skin irritation.

NOTE: *A PBT -/vPvB Assessment is not required.*

Signal Word	Dangers
Hazard Statements	May cause an allergic skin reaction. If inhaled, may case allergy and/or asthma. symptoms and breathing difficulties. May cause cancer.

Precautionary Statements: Prevention	Obtain special handling instructions before use. Do not handle until all safety precautions have been read, reviewed and understood. Use personal protective equipment if required. In case of inadequate ventilation where material is being handled, wear respiratory protection. Do not breathe in dust, fumes, gas, mist, vapors, or spray. Wear protective gloves. Wash any exposed skin and hands thoroughly after handling. Do not wear contaminated clothing out of the workplace. Wash contaminated clothing before wearing it again.

Response Statements: Response	Get medical attention and/or advice if exposed or concerned about the product. **If on Skin:** Wash with soap and water. If skin irritation begins, get medical attention/advice. If on clothing, wash before wearing again. **If Inhaled:** If breathing becomes difficult, remove the victim to fresh air and keep them comfortable for breathing. If respiratory symptoms occur, call a poison control system and/or medical professional.

Storage & Disposal	Store locked up. Dispose of contents or secure container in accordance with local, regional and/or international regulations.
Potential Effects of Exposure	**Inhalation:** May cause respiratory symptoms. **Skin Contact:** May cause a rash or skin irritation.

Chemical Safety Assessment: A Chemical Safety Assessment has not been carried out.

Classification System:

NFPA Ratings (Scale 0-4)

Health = 1

Fire = 0

Reactivity = 0

HMIS-Ratings (Scale 0-4)

Health = 1

Fire = 0

Reactivity = 0

Other Hazards

Results of PBT and vPvB assessment

PTB: Not applicable

vPvB: Not applicable

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

CHEMICAL NAME	CHEMICAL SYMBOL/FORMULA	CAS NO.	EIN/ECS NO.	WEIGHT %
Cobalt	Co	7440-48-4	231-158-0	0-10%
Nickel	Ni	7440-02-0	231-111-4	0-1%
Chromium	Cr	7440-47-3	231-157-5	0-10%
Arsenic	As	7440-38-2	231-148-6	0-10%
Aluminum	Al	7429-90-5	231-072-3	0-10%
Nitrogen	N	7727-37-9	231-783-9	0-10%
Tin	Sn	7440-31-5	231-141-8	0-10%
Molybdenum	Mo	7439-98-7	231-107-2	0-5.3%
Tungsten	W	7440-33-7	231-143-9	0-10%
Iron	Fe	1309-37-1		0-81%
Copper	Cu	7440-50-8		
Manganese	Mn	7439-96-5		
Silicon	Si	7440-21-3		
Sulfur	S	7704-34-9	231-772-6	0-2.5%
Carbon	C	7440-44-0 1333-86-4	231-153-3	0-2.5%
Vanadium	V	1314-62-1 7440-62-2	231-171-1	0-2.1%

SECTION 4: FIRST-AID MEASURES

Eye Contact	If eye irritation begins, rinse opened eye with running water for several minutes. Get medical attention.
Skin Contact	If irritation or rash of skin begins, brush off excess dust and thoroughly wash the affected area with soap and water. Generally, the product does not irritate the skin.
Inhalation	If lung irritation begins (which includes coughing, wheezing, difficulty in breathing, etc.), remove from exposed area to fresh air. If symptoms persist, seek immediate medical attention. If breathing has stopped, perform resuscitation using universal CPR procedures. Keep patient warm. In case of unconsciousness place patient stably in side position for transportation.
Ingestion	If swallowed, call a medical professional immediately.
General Advice	After first aid measures have been taken, seek the appropriate medical attention. *Note: Symptoms of poisoning may even occur after several hours; therefore medical observation is recommended for at least 48 hours after the incident.*

Most Important Symptoms and Effects (both acute and delayed): No further relevant information available.

SECTION 5: FIRE-FIGHTING MEASURES

Flash Point: None
Fire Point: None

Extinguishing Media

- This product is not flammable.

Specific Hazards Arising from the Article Use

- No further relevant information available.

Hazardous Combustion Products

- A combustion hazard may present during operations that cause a release of dust or fumes.

Protective Equipment & Precautions for Firefighters

- Mouth respiratory protective device.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

Not required, but depending upon use of product, safety glasses may be recommended.

Environmental Precautions

No special measures required.

Methods and Materials for Containment and Cleanup

No special measures required.

SECTION 7: HANDLING AND STORAGE

Precautions for Safe Handling

Not applicable.

Incompatible Materials: Reacts with strong acids to generate Hydrogen gas.

Note: Periodic medical monitoring is recommended for individuals regularly exposed to dust, mist or fumes – with particular attention to any potential sensitization effects of such substances.

Conditions for Safe Storage, Including Any Incompatibles

Storage Conditions: Keep receptacle tightly sealed.

Incompatible Materials: Reacts with strong acids to generate Hydrogen gas.

Other Precautions

Not applicable.

Specific End Uses

Steel products are used as tools in machining and wear parts.

SECTION 8: EXPOSURE CONTROLS – PERSONAL PROTECTION

Control Parameters

Exposure Guidelines

CHEMICAL NAME	CAS #	ACGIH TLV	OSHA PEL	NIOSH IDLH
Aluminum	7429-90-5	TLV TWA: 1 mg/m3	TWA PEL: 15 mg/m3	TWA REL: 5-10 mg/m3
Arsenic	7440-38-2	TLV TWA: 0.01 mg/m3	TWA PEL: 0.01-0.5 mg/m3	TWA REL: 0.002 mg/m3
Carbon	7440-44-0	TLV TWA: 3.5 mg/m3	TWA PEL: 3.5 mg/m3	Not Available
Copper	7440-50-8	TLV TWA: 1 mg/m3	TWA PEL: 1 mg Co/m3	Not Available
Chromium	7440-47-3	TLV TWA: 0.5 mg/m3	TWA PEL: 0.5-1.0 mg/m3	TWA REL: 0.5 mg/m3
Cobalt	7440-48-4	TWA REL: 0.02-0.1 mg/m3	TWA PEL: 0.1 mg/m3	TWA REL: 0.05 mg/m3
Molybdenum	7439-98-7	TWA: 10 mg/m3	TWA: 15 mg/m3 5 mg/m3 RESP. FRACT	Not Available
Nickel	7440-02-0	TWA: 1-1.5 mg/m3	TWA PEL: 1 mg/m3	TWA REL: 0.015 mg/m3
Iron	1309-37-1	TWA: 5 mg/m3	TWA PEL: 10 mg/m3	Not Available
Nitrogen	7727-37-9	Not Available	Not Available	Not Available
Manganese	7739-96-5	TWA: 5 mg/m3	TWA PEL: 5 mg/m3	Not Available
Silicon	7440-21-3	TWA REL: 5 mg/m3	Not Available	Not Available
Tin	7440-31-5	TLV TWA: 2 mg/m3	TWA PEL: 2 mg/m3	TWA REL: 2 mg/m3
Tungsten	7440-33-7	TWA REL: Long Term: 5 mg/m3 Short Term: 10 mg/m3	*(Insoluble as We)* CAL/OSHA TWA: 5 mg/m3	TWA REL: Long Term: 5 mg/m3 Short Term: 10 mg/m3
Vanadium	7440-62-2 1314-62-1	Fume: 0.05mg/m3 Dust: TLV TWA: 0.05 mg/m3	Fume: 0.1mg/m3 Dust: TWA PEL: 0.05mg/m3	Not Available

Key Terms:

TLV: Threshold Limit Value / PEL: Permissible Exposure Limit / REL: Recommended Exposure Limit / OSHA: Occupational Safety & Health Administration US Dept. / ACGIH: American Conference of Governmental Industrial Hygienists, Inc. / NIOSH: US National Institute for Occupational Safety and Health

Appropriate Engineering Controls

Ventilation

Local ventilation should be used to minimize exposure of dust, mist or fumes that are generated as a result of dry or wet grinding. Keep airborne concentration of dust and fumes below ACGIH TLV. If ventilation is not available, use respirators as listed below.

Eyewash & Hand Wash Stations

Eyewash and hand washing stations should be located nearby if needed.

Personal Protection Measures

Eye and Face Protection

Approved safety glasses or face shields should be worn when metal working.

Skin and Body Protection

Protective gloves and clothing should be worn, as appropriate. The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

Material of gloves:

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Penetration time of glove material:

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

Respiratory Protection

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air. If fumes, misting or dust conditions occur and TLV as indicated in Section II is exceeded, provide NIOSH approved respirators.

General Protective and Hygienic Measures

Keep away from food and beverage. Wash hands before breaks and at the end of work. Immediately remove all soiled and contaminated clothing.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on Basic Physical and Chemical Properties

Property	Value
Appearance	Color according to product specification Various shapes.
Odor	Odorless metal Characteristic
Odor Threshold	N/A
Physical State	Solid
pH	N/A
Softening/Melting/Freezing Point	Approximately 2500 °F
Boiling Point	-195 °C (-319 °F) 2362 °C (4284 °F) ≥ 5000 °F
Flash Point	N/A
Evaporation Rate	N/A Butyl Acetate = 1: N/A
Flammability – (Solid, Gas)	Not determined
Vapor Pressure	N/A
Vapor Density	N/A Air = 1: N/A
Relative Density	Not determined
Specific Gravity	H_2O = 1: Approximately 7.8-8.2 (60 °F)
Water Solubility	Insoluble
Partition Coefficient	N/A
Danger of Explosion	Product does not present an explosion hazard
Auto-ignition Temperature	Product is not self-igniting
Decomposition Temperature	Not determined
Kinematic Viscosity	Not applicable
Dynamic Viscosity	Not applicable
Explosive Properties	Lower Limits: Not determined Upper Limits: Not determined
Density	At 20 °C (68 °F): 7.44437 g/cm^3 (62.123 lbs/gal) 6.96008 g/cm^3 (58.082 lbs/gal)
Solvent Content:	Organic Solvents: 0.0%
Solids Content:	94.5-96%
% Volatiles by Volume:	N/A

Please Note: Chemicals/Materials listed in Section 3 that are not listed above are not applicable in this Section.

SECTION 10: STABILITY AND REACTIVITY

Reactivity: Not Applicable.

Chemical Stability: Chemically stable.

Possibility of Hazardous Reactions: No dangerous reactions known.

Conditions to Avoid: No further relevant information known.

Hazardous Decomposition Products: Metallic Oxides.

Incompatible Materials: React with strong acids to generate Hydrogen gas.

SECTION 11: TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure

Routes of Entry Include: Inhalation, Ingestion, Skin and Eye Contact

We do not consider this product in the form it is sold to constitute a physical hazard or a health hazard. Metal working operations on this product such as heating, forging, welding, cutting, grinding and other processes which results in the generation of fumes may transform ingredients to a form which could affect exposed individuals.

- **Inhalation** – Dust from grinding can cause irritation of the nose/throat. In some cases, it also has the potential for causing permanent respiratory or pulmonary disease; including occupational asthma, pulmonary fibrosis and interstitial pneumonitis. Symptoms may include coughing, wheezing, shortness of breath, chest tightness, weight loss, minor radiological abnormalities, and the development of hypersensitivity asthma in some people. Respiratory or pulmonary disease is progressive and can lead to permanent disability or death. It is reported that workers that have been exposed to air-borne cemented steel dust have a higher risk of contracting lung cancer.
- **Eye Contact** – May cause irritation.
- **Skin Contact** – May cause irritation or an allergic skin rash due to cobalt or nickel sensitization. Certain skin conditions, such as dry skin, may be aggravated by exposure.
- **Ingestion** – Reports outside the industry suggest that ingestion of significant amounts of cobalt has the potential for causing blood, heart and other organ problems. Current scientific information indicates no adverse effects are likely from ingestion of small amounts of nickel dust generated from these products.

Symptoms Related to the Physical, Chemical and Toxicological Characteristics

- Cobalt has been identified by the IARC (International Agency for Research on Cancer) as a Group 2A Carcinogen (*probably carcinogenic to humans*). Cobalt when inhaled is presumed to be potentially carcinogenic to humans, largely based on animal evidence.
- Symptoms of exposure to dust/mist include unproductive coughing, wheezing, shortness of breath, chest tightness and weight loss.

Delayed, Immediate and Chronic Effects from Short and Long Term Exposure

Immediate effects from Short-Term Exposure: None known

Effects of Overexposure:

Acute: Short term overexposure to the dust, fumes and/or oxides of certain components of steel products may cause irritation of the eyes, nose or throat that may result in 'metal fume fever' which is characterized by a metallic or sweet taste, dryness and irritation of the throat, wheezing, discoloration of the tongue and flu-like symptoms.

Chronic: Excessive and prolonged overexposure to the dust fumes and/or oxides of certain components of steel products may result in chronic interstitial pneumonitis, discoloration of the skin and hair, allergic bronchitis, neoplasms or loss of coordination and balance.

- Aluminum (Al): Possible irritation of eyes and mucous membranes. Reported as a cause of pulmonary fibrosis.
- Boron (B): May cause irritation of the nose, throat and respiratory tract. Can also cause nose bleeds.
- Carbon (C): No permanent disability. Mild inhalation hazard. May cause irritation of eyes and mucous membranes. Prolonged exposure above limits may cause temporary or permanent damage to lungs and heart.
- Chromium (Cr): Insoluble chromium compounds are suspect carcinogens. Can cause irritation of eyes and mucous membranes, dermatitis, skin ulcers and nasal septum perforation. Excessive inhalation of dusts or fumes may result in irritation or ulceration in respiratory system. The toxicity and health hazards of chromium are heavily dependent upon its oxidization state. Trivalent and divalent chromium, as in chromium metal and chromium-containing alloys have a low order of toxicity. The hexavalent form (chromates and chronic acids) may cause irritant and allergic contact dermatitis, skin ulcers, and nasal irritation varying from rhinitis to perforation of the nasal septum.
- Cobalt (Co): May cause interstitial pneumonitis, irritation of eyes, mucous membranes, allergic skin rashes and respiratory disease. Cough, wheezing and shortness of breath may be considered symptoms of hypersensitivity.
- Copper (Cu): Excessive inhalation of dust or fumes may cause metal fume fever. May irritate eyes, skin and respiratory tract. Symptoms may include nausea, metallic taste, fever, chilling, pain in joints and muscles and discoloration of the skin or hair.
- Iron (Fe): May cause irritation of the eyes, nose and throat and metal fume fever. Inhalation of iron oxide fumes and dust may cause chronic bronchitis, conjunctivitis, choroiditis, retinitis and siderosis of tissues.
- Manganese (Mn): Prolonged exposure can affect the central nervous system with symptoms resembling Parkinson's Disease. Can cause irritation of the eyes nose and throat; metallic taste, metal fume fever, bronchitis, acute pneumonia and pneumonitis (respiratory disease). Inhalation can also cause increased upper respiratory disorders and infections, cumulative lung damage, psychiatric disorders, liver cirrhosis and anemia.
- Molybdenum (Mo): Mat cayuse mild irritation of eyes, nose and mucous membranes. Low toxicity. Human industrial poisoning by molybdenum and permanent disability form exposure have yet to be reported.

- Nickel (Ni): Fume, dust or mist may be a carcinogen and may cause cancer of the paranasal sinuses and lungs. Inhalation may result in pneumonitis, respiratory irritation or irritation to the eyes, nose, and mucous membranes. Nickle dust or fumes may also cause sensitization dermatitis, “nickel itch”, pulmonary edema, asthma, headache, and vomiting.
- Silicon (Si): Inhalation as silicon dioxide may cause disability.
- Tantalum (Ta): Dust may cause slight irritation to eyes, nose and throat.
- Titanium (Ti): Considered a physiologically inert dust; however, high concentrations may cause irritation of eyes and mucous membranes.
- Tungsten (W): Low toxicity, no adverse heath effects have been reported in humans. Excessive exposure could result in pulmonary changes.
- Vanadium (V): As vanadium pentoxide dust or fumes it may cause irritation of eyes, nose and respiratory tract (both acute and more severe then acute exposure), chronic bronchitis and allergic skin rash. As a metal it is non-toxic.

Other Effects of Exposure:

- **Primary Irritant Effect:**
  - On the skin: No irritant effect.
  - On the eye: No irritant effect.
- **Sensitization:** Sensitization possible through inhalation and skin contact.
- **Reproductive Toxicity:** Unknown.
- **STOT – single exposure:** Unknown.
- **STOT – repeated exposure:** Unknown.
- **Aspiration Hazard:** Unknown.
- **Additional toxicological information:**
  - The product shows the following dangers according to internally approved calculation methods for preparations:
    - Harmful
    - Irritant

Acute Toxicity:

Chemical Name	LD/LC50 Values that are Relevant for Classification:
Arsenic	Oral / LD50 / 763 mg/kg (rat)
Cobalt	Oral / LD50 / 6170 mg/kg (rat)

Germ Cell Mutagenicity: The single components of the mixture are not mutagenic.

Carcinogenicity: See information below

Chemical Name	IARC Rating
Cobalt	2B
Chromium	3
Nickel	1
Arsenic	1

Chemical Name	NTP
Arsenic	K
Nickel	R
Chromium	

OSHA -Ca
Arsenic

Note: Cobalt and Nickel are known to the state of California to cause cancer. (Proposition 65)

SECTION 12: ECOLOGICAL INFORMATION

Aquatic Toxicity: No further information available.

Persistence and Degradability: No further information available.

Bioaccumulative Potential: Mo further information available.

Mobility in the Soil: No further information available.

Ecotoxic Effects: Toxic for fish.

Results of PBT and vPvB Assessment: Not applicable.

General Notes: Water hazard class 3 (Self-assessment): extremely hazardous for water. Do not allow product to reach ground water, water course or sewage system, even in small quantities. It is a danger to drinking water if even extremely small quantities leak into the ground. It is also poisonous for fish and plankton in water bodies and toxic for aquatic organisms.

Other Adverse Effects: No further information available.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Treatment Methods:

Disposal of Wastes: Owners are able to sell waste in solid form as scrap. If waste is a dust (etc.) you are to follow Federal, State and Local regulations regarding disposal. Waste must not be disposed of with household garbage. Do not allow product to reach sewage system.

Contaminated Packaging: Disposal must be made according to official regulations.

SECTION 14: TRANSPORT INFORMATION

DOT: Not regulated as sold

IATA: Not regulated as sold

IMDG: Not regulated as sold

ADN: Not regulated as sold

As sold, solid hardmetal blanks are not dangerous goods. The transport classification below applies to hardmetal only:

UN-No.	Not Regulated
UN Proper Shipping Name	Not Regulated
Transport Hazard Class	Not Regulated
Packing Group	Not Regulated
Environmental Hazard	No

SECTION 15: REGULATORY INFORMATION

Inventory Status

US Toxic Substances Control Act Inventory (TSCA): All ingredients are listed.

Occupational Safety and Health Act (OSHA): Federal OSHA Hazard Communication Standard 29 CFR 1910.1200

USA Federal Regulations

SARA 313 (Superfund Amendments & Reauthorization Act)

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical Name
Chromium – 7440-47-3
Cobalt – 7440-48-4
Nickel – 7440-02-0
Aluminum – 7429-90-5
Arsenic – 744-38-2
Vanadium – 7440-62-2
Manganese – 7439-96-5
Copper – 7440-50-8
Red Phosphorus – 7723-14-0

US EPA Label Information

Chemical Name	EPA (Environmental Protection Agency)
Chromium – 7440-47-3	D
Arsenic – 7440-38-2	A
Manganese – 7439-96-5	D
Copper – 7440-50-8	D
Red Phosphorus – 7723-14-0	D

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	Yes
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

Section 355 (Extremely Hazardous Substances):
Red Phosphorus – 7723-14-0

Chemical Name	TLV (Threshold Limit Value established by ACGIH)
Chromium – 7440-47-3	A4
Aluminum – 7429-90-5	A4
Arsenic – 7440-38-2	A1
Cobalt – 7440-48-4	A3
Nickel – 7440-02-0	A5

NIOSH-Ca (National Institute for Occupational Safety and Health)
Arsenic – 7440-38-2
Nickel – 7440-02-0

CWA (Clean Water Act)

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical Name	CWA – Reportable Quantities	CWA – Toxic Pollutants	CWA – Priority Pollutants	CWA – Hazardous Substances
Chromium 7440-47-3	-	X	X	-
Nickel 7440-02-0	-	X	X	-

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Chromium 7440-47-3	5000 lb. – 10 lb.	-	RQ 5000 lb. final RQ RQ 2270 kg final RQ RQ 10 lb. final RQ RQ 4.54 kg final RQ
Nickel 7440-02-0	100 lb.	-	RQ 100 lb. final RQ RQ 45.4 kg final RQ

US State Regulations

California Proposition 65

This product contains the following Proposition 65 Chemicals:

Chemical Name
Cobalt – 7440-48-4
Nickel – 7440-02-0
Arsenic – 7440-38-2

US State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Chromium 7440-47-3	X	X	X
Cobalt 7440-48-4	X	X	X
Molybdenum 7439-98-7	X	X	X
Nickel 7440-02-0	X	X	X
Tungsten 7440-33-7	X	-	-
Vanadium 7440-62-2 1314-62-1	X	-	X

Canada Regulations

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all the information required by the CPR. As sold, product is a manufactured article and classification or labeling is not required.

WHMIS Hazard Class – D2A Very Toxic Materials

Non-controlled

Chemical Name	NPRI
Cobalt – 7440-48-4	X
Nickel – 7440-02-0	X

EU Regulations

EU Legislation: Regulation (EC) 1907/2006 (REACH)
Chemical Safety Assessment: A chemical safety report has been prepared for Cobalt. According to the requirements from the guide 'European Chemicals Agency Guidance on the compilation of Safety Data Sheets' – (October 2010), are in no exposure scenarios added to the SDS. An exposure scenario is only necessary if materials of the criteria for the listed hazard classes in Article 14 (4) of the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH) Regulation, as provided in Article 58 of the revised Regulation on classification, labeling and packaging (CLP) meeting.

The product(s) listed on this SDS is in compliance with Directive 2011/65/EU of European Parliament and of the Council of 8 June 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS). The product does not contain the following substances in concentrations greater than the maximum value listed after the substance:

- Lead (Pb): 1,000 ppm
- Cadmium (Cd): 100 ppm
- Mercury (Hg): 1,000 ppm
- Hexavalent Chromium (Cr6+): 1,000 ppm
- Poly Brominated Biphenyls (PBB): 1,000 ppm
- Poly Brominated Diphenyl (PBDE): 1,000 ppm

The product(s) listed on the SDS does not contain REACH substances of very high concern (SVHC), according to the European Chemical Agency (ECHA). Certain products may contain nickel, which has been issued a REACH restriction. However, the restriction is not applicable due to the nature of this product.

SECTION 16: OTHER INFORMATION

SDS Issued By:	MITGI
Information Contact:	info@mitgi.us
Original Date of Preparation:	December 6, 2023
Revision:	

Abbreviations and Acronyms:

ANSI	American National Standards Institute
BAF	Bioaccumulation Factors
BCF	Bio concentration Factors
CAS	Chemical Abstract Service
CFR	Code of Federal Regulations
CLP	Classification, Labeling and Packaging
CSA	Chemical Safety Assessment (REACH)
CSR	Chemical Safety Report (REACH)
DOT	US Department of Transportation
DSL	Canadian Domestic Substance List
EPA	Environmental Protection Agency
EU	European Union
GHS	Globalized Harmonization System
HMIS	Hazardous Material Identification System
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IDLH	Immediately Dangerous to Life or Health
NFPA	National Fire Protection Association
NTP	National Toxicology Program
OECD	Organization for Economic Cooperation and Development
OPPTS	Office of Pollution Prevention and Toxins
OSHA	US Occupational Safety and Health Administration
NIOSH	US National Institute for Occupational Safety and Health Administration
PBT	Persistent, Bio accumulative, Toxic (REACH)
PEL	Permissible Exposure Limit
PPE	Personal Protective Equipment
REACH	Registration, Evaluation, Authorization and Restriction of Chemicals
REL	Recommended Exposure Limit
SDS	Safety Data Sheet
STOT	Specific Organ Toxicity
STOT RE	Specific Organ Toxicity, Repeated Exposure
SVHC	Substance of Very High Concern (REACH)
TLV	Threshold Limit Value
vPvB	Very Persistent, Very Bio accumulative (REACH)
WHMIS	Workplace Hazardous Materials Information System

Users Responsibilities: This SDS provides information consistent with recommended applications of these products and anticipated activities involving the product. It is the user's responsibility to identify and protect against health and safety hazards presented by modification of hardmetal powders and products after manufacture. Individuals handling hardmetal powders should be informed of all relevant hazards and recommended safety precautions, and should have access to the information contained in this SDS**.**

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