

SAFETY DATA SHEET

Section 1 - Chemical Product and Company Identification

1.1 Product identifier

Product name Carbon Steel Welding Wire
Other means of identification Viking ER70S-6

1.2 Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses

For welding consumables and related products distributed by Davis Wire Company at the following locations

1.3 Details of the supplier of the SDS

1.3.1	
Company name	DW-National Standard
Address	1631 Lake Street, Niles, MI 49120
1.3.2	
Company name	DW-National Standard
Address	3602 N. Perkins Rd, Stillwater, OK 74075
1.3.3	
Company name	Davis Wire
Address	5555 North Irwindale Avenue, Irwindale, CA 91706
Tel	(800) 777-1618

1.4 Emergency telephone number

Call the emergency number (800) 777-1618

Section 2 - Hazards Identification

2.1 Classification	of the substance	or mixture

Classification acc. to GHS-US Not classified

2.2 Label Elements

Symbol(s)	No labeling applicable
Signal Words	No signal word applicable
Hazard Statement	PHYSICAL HAZARDS:
	Not classified as a physical hazard under GHS criteria.
	HEALTH HAZARDS:
	Not classified as a health hazard under GHS criteria.
	ENVIRONMENTAL HAZARDS:
	Not classified as an environmental hazard under GHS criteria.

	Not classified as an environmental hazard under GHS chiena.	
GHS Precautionary Stateme	ents	
Prevention	P260: Do not breathe dust/fume/gas/mist/vapours/spray. P261: Avoid breathing dust/fume/gas/mist/vapours/spray. P264: Wash hands thoroughly after handling. P270: Do not eat, drink or smoke when using this product. P271: Use only outdoors or in a well-ventilated area.	
Response	P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing. P312: Call a POISON CENTER/doctor if you feel unwell. P314: Get medical advice and attention if you feel unwell.	
Storage	P403+P235: Store in a well ventilated place. Keep cool. P405: Store locked up.	
Disposal	P501: Dispose of contents and container to appropriate waste site or reclaimer in accordance with local and national regulations.	

2.3 Other hazard

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This product as shipped in its massive form, is inert and not hazardous to human health. Under normal conditions of use during welding, this product and its fumes pose separate hazards. Exposure may aggravate those with pre-existing eye, skin, or respiratory conditions. Inhalation of dusts and fumes can cause metal fume fever. Symptoms can include a metallic or sweet taste in the mouth, sweating, shivering, headache, throat irritation, fever, chills, thirstiness, muscle aches, nausea, vomiting, weakness, fatigue, and shortness of breath. Overexposure to manganese fumes may affect the brain and central nervous system, resulting in poor coordination, difficulty speaking, and arm or leg tremor. This condition can be irreversible. Electric shock from welding equipment or electrodes may be fatal. Hot metal spatter and heat from electric arcs and welding flames may cause burns to the hands and body or may cause fire if it comes into contact with combustible materials. UV, IR and light radiation from an electric arc or welding flame process may cause damage to unprotected eyes. Fumes and gases generated during the welding process can be harmful to your health. If dust is generated, the dust may be a flammable solid, combustible dust, and self-heating. Use engineering controls and housekeeping to prevent exposure to and accumulation of dust in the workplace. Much of the information provided in this SDS is for situations of use in which hazardous exposures may occur, such as in welding applications or for metals in powdered form.

2.4 Unknown acute toxicity (GHS-US)

No data available

Section 3 – Composition/Information on Ingredient

Substance / Mixture	Mixture)	
Ingredient name	CAS No.	Weight %	Classification (GHS-US)
Iron	7439-89-6	95.9~97.74	Not classified
Carbon	7440-44-0	0.06~0.15	Not classified
Manganese	7439-96-5	1.4~1.85	Not classified
Silicon	7440-21-3	0.8~1.15	Not classified
Copper	7440-50-8	≤0.5	Not classified
Nickel	7440-02-0	≤0.15	Not classified
Chromium	7440-47-3	≤0.15	Not classified
Molybdenum	7439-98-7	≤0.15	Not classified

Section 4 - First Aid Measures

4.1 Description of first aid measures

4.1 Description of install measures		
Inhalation	Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.	
Skin contact	Flush with water for at least 15 minutes. Seek medical attention if irritation develops or persists.	
Eye contact	Immediately flush eyes with water and continue washing for at least 15 minutes. Obtain medical attention if discomfort persists.	
Ingestion	Do NOT induce vomiting. Get immediate medical attention.	

4.2 Most important symptoms and effects, both acute and delayed

4.2 Most important symptoms and	effects, both acute and delayed
Inhalation	Short-term (acute) overexposure to the gases, fumes, and dusts may include irritation of the eyes, lungs, nose, and throat. Some toxic gases associated with welding may cause pulmonary edema, asphyxiation, and death. Acute overexposure may include signs and symptoms such as watery eyes, nose and throat irritation, headache, dizziness, difficulty in breathing, frequent coughing, or chest pain. The presence of chromium/chromate in fume can cause irritation of nasal membranes and skin. Excessive inhalation or ingestion of manganese can produce manganese poisoning. Overexposure to manganese compounds may affect the central nervous system, symptoms of which are languor, sleepiness, muscular weakness,

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	emotional disturbances, and spastic gait resembling Parkinsonism. These symptoms can become progressive and permanent if not treated. Excessive inhalation of fumes may cause "Metal Fume Fever" with Flu-like symptoms such as chills, fever, body aches, vomiting, sweating, etc.	
Skin contact	Dusts may cause irritation.	
Eye contact	Causes eye irritation.	
Ingestion	Not an anticipated route of exposure during normal product handling. May be harmful if ingested.	
Over-exposure signs/ symptoms	Not available.	

4.3 Indication of the immediate medical attention and special treatment needed

No additional information available.

Section 5 - Fire Fighting Measures

5.1 Extinguishing media

Suitable extinguishing media

Use extinguishing media appropriate for surrounding fire. Class D Extinguishing Agent (for metal powder fires). Dry chemical powder, alcohol-resistant foam, carbon dioxide (CO2), dry sand.

Unsuitable extinguishing media

Do not use water when molten material or dust is involved, may spread fire.

5.2 Special hazards arising from the substance or mixture

Hazards from the substance or mixture	Not flammable. Dust generated from processing may present a dust explosion hazard.
Explosion hazard	Product is not explosive.
5.3 Advice for fire-fighters	
Precautionary measures fire	Exercise caution when fighting any chemical fire. Under fire conditions, hazardous fumes will be present.
Firefighting instructions:	Do not breathe fumes from fires or vapors from decomposition. Use water stream to cool containers. Keep upwind.
Protection During Firefighting	Firefighters must use full bunker gear including NIOSH-approved positive-pressure self-contained breathing apparatus to protect against potential hazardous combustion and decomposition products.
Hazardous Combustion Products	Oxides of iron. Oxides of manganese. Oxides of nickel. Oxides of copper. Chromium oxides.

Section 6 – Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures:

Do not handle until all safety precautions have been read and understood.

Use personal protective equipment. Keep people away from and upwind of spill/leak.

Ensure adequate ventilation. Avoid creating or spreading dust. Eliminate ignition sources. Evacuate unnecessary personnel.

6.2 Environmental precautions

Use appropriate containment to avoid environmental contamination.

Prevent from spreading or entering drains, ditches or rivers.

6.3 Methods and materials for containment and cleaning up

Contain and collect as any solid. Avoid generation of dust during clean-up of spills. Where possible allow molten material to solidify naturally.

Practice good housekeeping - spillage can be slippery on smooth surface either wet or dry.

6.4 Reference to other sections

See Section 7 for information on safe handling.

See section 8 for information on personal protection equipment.

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See Section 13 for information on disposal.

Section 7 - Handling and Storage

7.1 Precautions for safe handling Additional hazards when processed:

Product dust is combustible. Use care during processing to minimize generation of dust. Welding, cutting, or processing this material may release dust or fumes that are hazardous. As shipped this product does not pose any significant health hazards. Avoid skin and eye contact with dusts to prevent mechanical irritation. Risk of electric shock when welding. Arc rays and sparks can burn skin. Fumes from welding, or processing of this material can be harmful if inhaled. Inhalation of metal dusts and fumes may cause a condition commonly known as metal fume fever with symptoms which resemble influenza. Symptoms may be delayed 4-12 hours and begin with a sudden onset of thirst, and a sweet, metallic or foul taste in the mouth. Other symptoms may include upper respiratory tract irritation accompanied by coughing and a dryness of the mucous membranes, lassitude and a generalized feeling of malaise. Fever, chills, muscular pain, mild to severe headache, nausea, occasional vomiting, exaggerated mental activity, profuse sweating, excessive urination, diarrhea and prostration may also occur. See ANSI Z49.1-1967 Safety in Welding and Cutting published by the American Welding Society and OSHA Hazard Communication Standard 1910.1200 for additional details regarding the handling and storage of this material.

Hygiene Measures:

Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Do not eat, drink or smoke when using this product.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions	Store in a dry, cool place
Incompatible materials	Strong acids. Strong bases. Strong oxidizers. Corrosive substances in prolonged contact with metals may produce flammable hydrogen gas. Water (when product is in dust/molten form).

7.3 Specific end use(s)

The identified uses for this product are detailed in section 1.2.

Section 8 – Exposure Controls, Personal Protection

8.1 Control parameters

Occupational exposure limits values

Copper (7440-50-8)		
USA ACGIH	ACGIH TWA (mg/m ³)	0.2 mg/m³(fume)
USA OSHA	OSHA PEL (TWA) (mg/m ³)	0.1 mg/m³ (fume) 1 mg/m³(dust and mist)
Manganese (7439-96-5)		
USA ACGIH	ACGIH TWA (mg/m ³)	0.02 mg/m³(respirable fraction) 0.1 mg/m³(inhalable fraction)
USA OSHA	OSHA PEL (TWA) (mg/m ³)	5 mg/m ³
Silicon (7440-21-3)		
USA ACGIH	ACGIH TWA (mg/m³)	15 mg/m³(total dust) 5 mg/m³(respirable fraction)
Nickel (7440-02-0)		
USA ACGIH	ACGIH TWA (mg/m ³)	1.5 mg/m³(inhalable fraction)
USA OSHA	OSHA PEL (TWA) (mg/m ³)	1 mg/m ³
Chromium (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
Molybdenum (7439-98-7)		

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USA ACGIH	ACGIH TWA (mg/m ³)	10 mg/m ³ (inhalable fraction)
		3 mg/m³ (respirable fraction)
USA OSHA	OSHA PEL (TWA) (mg/m ³)	5 mg/m ³ (soluble compounds)
		15 mg/m ³ (insoluble compounds)

8.2 Exposure controls

Appropriate engineering controls:

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure to metal dust or fumes from use. Ensure adequate ventilation, especially in confined areas to control exposure to welding dust and fumes. Avoid dust production. Avoid creating or spreading dust. Ensure that dust-handling systems (such as exhaust ducts, dust collectors, vessels, and processing equipment) are designed in a manner to prevent the escape of dust into the work area (i.e., there is no leakage from the equipment).

Personal protective equipment

Safety glasses. Gloves. Protective clothing. Wear respiratory protection. When welding: Welding helmet or googles, welding gloves, and respiratory protection.









Material for protective clothing	Wear suitable protective clothing. With molten material wear thermally protective clothing.
Respiratory protection	Use ventilation to prevent exposure to welding fumes and dust. If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn.
Hand protection	Protective Gloves. If material is hot, wear thermally resistant protective gloves.
Eye / Face protection	Safety glasses. Welders should wear goggles or safety glasses with side shields that comply with ANSI Z87.1 under welding helmets and always wear goggles or other suitable eye protection when welding.
Skin and body protection:	Wear suitable protective clothing to prevent contact with dust, sparks, and hot materials from welding.

Section 9 - Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Physical appearance(20°C)	Solid wire, metallic
Odor	Pleasant
Odor threshold	No data available
pH	No data available
Boiling point/range	No data available
Melting point/range	No data available
Flash Point	No data available
Explosion Limits	
Lower	No data available
Upper	No data available
Autoignition Temperature	No data available
Vapour Pressure	No data available
Vapour Density	No data available
Density	No data available
Solubility	Insoluble in water.

9.2 Other information

Other physical-chemical data were not identified

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Section 10 - Stability and Reactivity

10.1 Reactivity

No specific reactivity hazards associated with this product.

10.2 Chemical Stability

This product is stable.

10.3 Possibility of hazardous reactions

Stable under recommended storage conditions.

10.4 Conditions to avoid

Incompatible materials

10.5 Incompatible materials

Strong acids. Strong bases. Strong oxidizers. Corrosive substances in prolonged contact with metals may produce flammable hydrogen gas. Water (when product is in dust/molten form).

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10.6 Hazardous decomposition products

Under conditions of fire this material may produce: Oxides of iron. Oxides of manganese. Oxides of nickel. Oxides of copper. Chromium oxides. Molybdenum oxides.

Section 11 - Toxicological Information

11.1 Information on toxicological effects

11.1 Illiorination on toxicological t	3110013
Acute toxicity	Not classified
LD50 and LC50 Data	Not available
Skin Irritation / Corrosion	Not classified
Serious eye damage/irritation	Not classified
Respiratory or skin Sensitization	Not classified
Germ cell mutagenicity	Not classified
Teratogenicity	Not classified
Carcinogenicity	Not classified
Specific target organ toxicity (single exposure)	Not classified
Specific target organ toxicity (repeated exposure)	Not classified
Reproductive toxicity	Not classified
Aspiration hazard	Not classified

Potential acute health effects

Eye contact	No known significant effects or critical hazards
Inhalation	No known significant effects or critical hazards
Skin contact	No known significant effects or critical hazards
Ingestion	No known significant effects or critical hazards

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact	Prolonged contact with large amounts of dust may cause mechanical irritation
Inhalation	Not expected to present a significant inhalation hazard under anticipated conditions of normal use.
Skin contact	Prolonged contact with large amounts of dust may cause mechanical irritation.
Ingestion	Ingestion is not considered a potential route of exposure

Information on Toxicological effects - Ingredient(s)

LD50 and LC50 Data

Nickel (7440-02-0)		
LD50 Oral Rat	>9000 mg/kg	
Manganese (7439-96-5)		

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LD50 Oral Rat >2000 mg/kg Silicon (7440-21-3) LD50 Oral Rat 3160 mg/kg Chromium (7440-47-3) LD50 Oral Rat >5000 mg/kg Molybdenum (7439-98-7) LD50 Oral Rat >2000 mg/kg LD50 Dermal Rat >2000 mg/kg	A Davis Wire Company		Report No.: OT20160103E/01
LD50 Oral Rat 3160 mg/kg Chromium (7440-47-3) LD50 Oral Rat >5000 mg/kg Molybdenum (7439-98-7) LD50 Oral Rat >2000 mg/kg	LD50 Oral Rat	>2000 mg/kg	
Chromium (7440-47-3) LD50 Oral Rat >5000 mg/kg Molybdenum (7439-98-7) >2000 mg/kg LD50 Oral Rat >2000 mg/kg	Silicon (7440-21-3)		
LD50 Oral Rat >5000 mg/kg Molybdenum (7439-98-7) LD50 Oral Rat >2000 mg/kg	LD50 Oral Rat	3160 mg/kg	
Molybdenum (7439-98-7) LD50 Oral Rat >2000 mg/kg	Chromium (7440-47-3)		
LD50 Oral Rat >2000 mg/kg	LD50 Oral Rat	>5000 mg/kg	
	Molybdenum (7439-98-7)		
LD50 Dermal Rat >2000 mg/kg	LD50 Oral Rat	>2000 mg/kg	
======================================	LD50 Dermal Rat	>2000 mg/kg	
Carbon (7440-44-0)	Carbon (7440-44-0)		
LD50 Oral Rat >10000 mg/kg	LD50 Oral Rat	>10000 mg/kg	
Iron (7439-89-6)	Iron (7439-89-6)		
LD50 Oral Rat 98.6 g/kg	LD50 Oral Rat	98.6 g/kg	

Nickel (7440-02-0)	Nickel (7440-02-0)			
IARC Group	2B			
NTP Status	Reasonably anticipated to be Human Carcinogen.			
OSHA Hazard Communication Carcinogen list	In OSHA Hazard Communication Carcinogen List.			
Chromium (7440-47-3)				
IARC Group	3			

Section 12 - Ecological Information

12.1 Ecotoxicity

Product/ingredient name	Result			
Nickel (7440-02-0)				
LC50 fish 1	100 mg/l (exposure time: 96 h – species: brachydanio rerio)			
EC50 daphnia 1	13 (13 - 200) µg/l (Exposure time: 48h - Species: Ceriodaphnia dubia [static])			
LC 50 fish 2	1.3 mg/l (Exposure time: 96 h - Species: Cyprinus carpio [semistatic])			
EC50 daphnia 2	1 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])			
EC50 other aquatic organisms 2	0.174 (0.174 - 0.311) mg/l (Exposure time: 96 h - Species: Pseudokirchneriella subcapitata [static])			
Manganese (7439-96-5)				
NOEC chronic fish	3.6 mg/l (Exposure time: 96h; Species: Oncorhynchus mykiss)			
Copper (7440-50-8)	Copper (7440-50-8)			
LC50 fish 1	≤0.0068 (0.0068 - 0.0156) mg/l (Exposure time: 96 h - Species: Pimephales promelas)			
EC50 daphnia 1	0.03 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])			
EC50 other aquatic organisms 1	0.0426 (0.0426 - 0.0535) mg/l (Exposure time: 72 h - Species: Pseudokirchneriella subcapitata [static])			
LC 50 fish 2	0.3 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])			
EC50 other aquatic organisms 2	0.031 (0.031 - 0.054) mg/l (Exposure time: 96 h - Species: Pseudokirchneriella subcapitata [static])			

12.2 Persistence/ degradability

Not readily biodegradable

12.3 Bioaccumulative potential (BCF)

No data available

12.4 Mobility in soil

No data available

12.5 Result of PBT and vPvB assessment

No data available

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12.6 Other adverse effects

No data available

Section 13 - Disposal Considerations

13.1 Waste treatment methods

Comply with Federal, State, and local regulations.

13.2 Material Disposal Recover or recycle if possible. It is the responsibility of the waste generator to determine the toxicity and physical properties of the

material generated to determine the proper waste classification and disposal methods in compliance with applicable regulations. Do not

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dispose into the environment, in drains or in water courses.

13.3 Container Disposal Dispose in accordance with prevailing regulations, preferably to a

recognised collector or contractor. The competence of the collector

or contractor should be established beforehand.

13.4 Local Legislation Disposal should be in accordance with applicable regional, national,

and local laws and regulations.

Section 14 – Transport Information

	UN	DOT	IMDG	IATA
UN number	Not regulated	Not regulated	Not regulated	Not regulated
UN proper shipping name	-	-	-	-
Transport hazard class(es)	-	-	-	-
Packing group	-	-	-	-
Environmental hazards	No	No	No	No
Special precautions for user	Not available	Not available	Not available	Not available
Additional information	-	-	-	-

Section 15 – Regulatory Information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

US Federal Regulations

Nickel (7440-02-0)			
Listed on the United States TSCA (Toxic Substances Control Act) inventory			
Listed on United States SARA Section 313			
RQ(Reportable Quantity, Section 304 of EPA's List of Lists) 100 lb (only aplicable if particles are <100 μm)			
SARA Section 311/312 Hazard classes Immediate (acute) health hazard Delayed (chronic) health hazard			
SARA Section 313 – Emission Reporting 0.1%			
Manganese (7439-96-5)			
Listed on the United States TSCA (Toxic Substan	nces Control Act) inventory		
Listed on United States SARA Section 313			
SARA Section 313 – Emission Reporting 1%			
Silicon (7440-21-3)			
Listed on the United States TSCA (Toxic Substances Control Act) inventory			
Chromium (7440-47-3)			
Listed on the United States TSCA (Toxic Substances Control Act) inventory			
Listed on United States SARA Section 313			
SARA Section 313 – Emission Reporting 1%			
Copper (7440-50-8)			
Listed on the United States TSCA (Toxic Substances Control Act) inventory			

Listed on United States SARA Section 313 Shanghai Outao Testing Technology Service Co., Ltd

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SARA Section 313 – Emission Reporting	1%
Molybdenum (7439-98-7)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Listed on United States SARA Section 313	
Carbon (7440-44-0)	
Listed on the United States TSCA (Toxic Substar	nces Control Act) inventory
Iron (7439-89-6)	
Listed on the United States TSCA (Toxic Substar	nces Control Act) inventory
SARA Section 313 – Emission Reporting	1%
US State Regulations	
U.S California - Proposition 65 -	WARNING: This product contains chemicals known
Carcinogens list	to the State of California to cause cancer and birth
	defects or other reproductive harm.
Nickel (7440-02-0)	MADNING. This product contains showing by
U.S. – California – Proposition 65 –	WARNING: This product contains chemicals known to the State of California to cause cancer and birth
Carcinogens list	defects or other reproductive harm.
Nickel (7440-02-0)	dolooto of other reproductive fiailli.
U.S Massachusetts - Right To Know List	
U.S New Jersey - Right to Know Hazardous Substance List	
U.S Pennsylvania - RTK (Right to Know) - Environmental Hazard List	
U.S Pennsylvania - RTK (Right to Know) - Special Hazardous Substances	
U.S Pennsylvania - RTK (Right to Know) List	
Manganese (7439-96-5)	
U.S Massachusetts - Right To Know List	
U.S New Jersey - Right to Know Hazardous Substance List	
U.S Pennsylvania - RTK (Right to Know) - Environmental Hazard List	
U.S Pennsylvania - RTK (Right to Know) List	
Silicon (7440-21-3)	
U.S Massachusetts - Right To Know List	
U.S New Jersey - Right to Know Hazardous Substance List U.S Pennsylvania - RTK (Right to Know) List	
Chromium (7440-47-3)	
U.S Massachusetts - Right To Know List	
U.S New Jersey - Right to Know Hazardous Substance List	
U.S Pennsylvania - RTK (Right to Know) - Environmental Hazard List	
U.S Pennsylvania - RTK (Right to Know) - Special Hazardous Substances	
U.S Pennsylvania - RTK (Right to Know) List	
Copper (7440-50-8)	
U.S Massachusetts - Right To Know List	
U.S New Jersey - Right to Know Hazardous Substance List	
U.S Pennsylvania - RTK (Right to Know) - Envi	ronmental Hazard List
U.S Pennsylvania - RTK (Right to Know) List	
Molybdenum (7439-98-7)	
U.S Massachusetts - Right To Know List	
U.S New Jersey - Right to Know Hazardous Substance List	
U.S Pennsylvania - RTK (Right to Know) List	
Canadian Regulations	
Carbon Steel Welding Wire	parding to MILIMIC Classification suitaria
	cording to WHMIS Classification criteria
Nickel (7440-02-0)	
Listed on the Canadian DSL (Domestic Substances List) Listed on the Canadian IDL (Ingredient Disclosure List)	
IDL Concentration 0.1 %	
Class D Division 2 Subo	livision B - Toxic material causing other toxic effects
Class D Division 2 Subdivision A - Very toxic material causing other toxic	

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Manganese (7439-96-5)

Listed on the Canadian DSL (Domestic Substances List) Listed on the Canadian IDL (Ingredient Disclosure List)

effects

IDL Concentration 1 %

WHMIS Classification Uncontrolled product according to WHMIS Classification criteria

Silicon (7440-21-3)

Listed on the Canadian DSL (Domestic Substances List)

WHMIS Classification Uncontrolled product according to WHMIS Classification criteria

Chromium (7440-47-3)

Listed on the Canadian DSL (Domestic Substances List) Listed on the Canadian IDL (Ingredient Disclosure List)

IDL Concentration 0.1 %

WHMIS Classification Uncontrolled product according to WHMIS Classification criteria

Copper (7440-50-8)

Listed on the Canadian DSL (Domestic Substances List) Listed on the Canadian IDL (Ingredient Disclosure List)

IDL Concentration 1 %

WHMIS Classification Uncontrolled product according to WHMIS Classification criteria

Molybdenum (7439-98-7)

Listed on the Canadian DSL (Domestic Substances List) Listed on the Canadian IDL (Ingredient Disclosure List)

IDL Concentration 1 %

WHMIS Classification Uncontrolled product according to WHMIS Classification criteria

Carbon (7440-44-0)

Listed on the Canadian DSL (Domestic Substances List)

WHMIS Classification Uncontrolled product according to WHMIS Classification criteria

Iron (7439-89-6)

Listed on the Canadian DSL (Domestic Substances List)

WHMIS Classification Class B Division 4 - Flammable Solid Class B Division 6 - Reactive Flammable Material

This product has been classified in accordance with the hazard criteria of the Controlled Products

Regulations (CPR) and the SDS contains all of the information required by CPR.

Section 16 - Additional Information

16.1 Revision Information

Date of the previous revision: Not applicable.
Date of this revision: January 12th, 2016

16.2 Relevant R-phrase(s) and H-statement(s)
Risk Phrases
Not applicable
Safety Phrases
Not applicable

16.3 Abbreviations and acronyms

IMDG International Maritime Code for Dangerous Goods.

IATA International Air Transport Association.

TSCA Toxic Substances Control Act, The American chemical inventory.

HMIS Hazardous Materials Identification System set by OSHA.

16.4 Declare to reader

This MSDS was prepared sincerely on the basis of the information we could obtained, however, any warranty shall not be given regarding the data contained and the assessment of hazards and toxicity. Prior to use, please investigate not only the hazards and toxicity information but also the laws and regulations of the organization, area and country where the products are to be used, which shall be given the first priority. Products are supposed to be used promptly after purchase in consideration of safety. Some new information or amendments may be added afterwards. If the products are to be used far behind the expected time of use or you have any questions, please feel free to contact us. The stated cautions are for normal handling only. In case of special handling, sufficient care should be taken, in addition to the safety measures suitable for the situation. All chemical products should be

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treated with the recognition of "having unknown hazards and toxicity", which differ greatly depending on the conditions and handling when in use and/or the conditions and duration of storage. The products must be handled only by those who are familiar with specialized knowledge and have experience or under the guidance of those specialists throughout use from opening to storage and disposal. Safe usage conditions shall be set up on each user's own responsibility.

PRODUCT PHOTO



END OF REPORT