Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Date of issue: 03/24/2015 Revision date: 11/10/2015 Supersedes: 03/24/2015 Version: 2.0

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Identification

Product form : Article

Product name : Eureka Cobalt Base MIG Wires and TIG Rods 706, 6, 12, 1, 21, X, MF-201, and 25

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

Use of the substance/mixture : Welding industry.

1.3. Details of the supplier of the safety data sheet

Eureka Welding Alloys

2000 E. Avis Dr.

Madison Heights, MI 48045 - USA

T 800-962-8560

rkamen@eurekaweldingalloys.com

1.4. Emergency telephone number

Emergency number : 1-800-962-8560

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS-US classification

Not classified

2.2. Label elements

GHS-US labeling

No labeling applicable

2.3. Other hazards

Other hazards not contributing to the

classification

Exposure to metal dusts and oxides may cause metal fume fever. Metal fume fever is a temporary flu-like condition characterized by chills, fever, muscle aches and pains, nausea and vomiting. Typically the symptoms appear within a few hours after exposure and subside within 2-3 days with no permanent effects. Inhalation of fumes or vapors may cause respiratory irritation.

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%	Classification (GHS-US)
Cobalt	(CAS No) 7440-48-4	55 - 85	Resp. Sens. 1, H334 Skin Sens. 1, H317 Carc. 2, H351
Chromium	(CAS No) 7440-47-3	10 - 35	Not classified
Tungsten	(CAS No) 7440-33-7	<= 18	Flam. Sol. 1, H228 Self-heat. 2, H252
Nickel	(CAS No) 7440-02-0	<= 15	Skin Sens. 1, H317 Carc. 2, H351 STOT RE 1, H372
Iron	(CAS No) 7439-89-6	<= 10	Not classified
Molybdenum	(CAS No) 7439-98-7	<= 10	Not classified
Carbon	(CAS No) 7440-44-0	<= 3	Not classified
Potassium titanate	(CAS No) 12030-97-6	<= 3	Not classified
Silicon	(CAS No) 7440-21-3	<= 2	Not classified
Manganese	(CAS No) 7439-96-5	<= 2	Not classified

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Niobium	(CAS No) 7440-03-1	<= 2	Not classified

Full text of H-phrases: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures after inhalation : If inhaled and if breathing is difficult, remove victim to fresh air and keep at rest in a position

comfortable for breathing.

First-aid measures after skin contact : Gently wash with plenty of soap and water. Wash contaminated clothing before reuse. In the

event of contact with molten product: Cool skin rapidly with cold water after contact with molten

product

First-aid measures after eye contact : Hot material: Immediately flush eyes with plenty of water for at least 15 minutes. Seek medical

assistance for mechanical removal of this material from the eye. Cold material: Flush eyes with plenty of water. Seek medical attention if irritation persists. Use of flush fluid, other than water,

is not recommended

First-aid measures after ingestion : Not expected to present a significant ingestion hazard under anticipated conditions of normal

use.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries after inhalation : Dust from this product may cause irritation to the respiratory tract. Inhalation of fumes may

cause metal fume fever.

Symptoms/injuries after skin contact : Heated product causes burns.

Symptoms/injuries after eye contact : Excessive dust production may cause minor eye irritation. Heated product causes burns.

Chronic symptoms : Excessive or prolonged inhalation of fumes may cause metal fume fever.

4.3. Indication of any immediate medical attention and special treatment needed

All treatments should be based on observed signs and symptoms of distress in the patient

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Carbon dioxide. Dry chemical. Foam. Sand. Water fog. Use extinguishing media appropriate for

surrounding fire.

5.2. Special hazards arising from the substance or mixture

No additional information available

5.3. Advice for firefighters

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

Wear fire/flame resistant/retardant clothing. Wear a self-contained breathing apparatus.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Avoid creating or spreading dust.

6.1.1. For non-emergency personnel

No additional information available

6.1.2. For emergency responders

No additional information available

6.2. Environmental precautions

Avoid release to the environment. Prevent dispersion.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Sweep or shovel spills into appropriate container for disposal. Minimize generation of dust.

6.4. Reference to other sections

Section 7: safe handling. Section 8: personal protective equipment. Section 13: disposal information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Avoid breathing dust, fume, gas. Ensure good ventilation of the work station. Handle in

accordance with good industrial hygiene and safety procedures.

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Hygiene measures

: Always wash your hands immediately after handling this product, and once again before leaving the workplace. Contaminated work clothing should not be allowed out of the workplace.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a dry place. Store in correctly labelled containers.

SECTION 8: Exposure controls/personal protection

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8.1	1.	Control	parameters

Nickel (7440-02-0)	4 COULTMA (0.0 / 2/: 1 1 1 1
USA - ACGIH	ACGIH TWA (mg/m³)	0.2 mg/m³ (inhalable) 0.1 mg/m³ (soluble)
		1.5 mg/m³ (inhalable fraction)
		The might (initialization resistin)
Silicon (7440-21-3)		
USA - ACGIH	ACGIH TWA (mg/m³)	10 mg/m³
USA - OSHA	OSHA PEL (TWA) (mg/m³)	15 mg/m³ (total dust)
		5 mg/m³ (respirable dust)
Manganese (7439-96-5		
USA - ACGIH	Local name	Manganese
USA - ACGIH	ACGIH TWA (mg/m³)	0.02 mg/m³
USA - ACGIH	Remark (ACGIH)	CNS impair; A4
USA - OSHA	OSHA PEL (Ceiling) (mg/m³)	5 mg/m³
Carbon (7440-44-0)	·	
USA - OSHA	OSHA PEL (TWA) (mg/m³)	15 mg/m³ (total dust)
		5 mg/m³ (respirable dust)
Tungsten (7440-33-7)		
USA - ACGIH	ACGIH TWA (mg/m³)	1 mg/m³ (soluble compounds)
		5 mg/m³ (insoluble compounds)
USA - ACGIH	ACGIH STEL (mg/m³)	3 mg/m³ (soluble compounds) 10 mg/m³ (insoluble compounds)
		10 mg/m (insoluble compounds)
Molybdenum (7439-98-	7)	
USA - ACGIH	ACGIH TWA (mg/m³)	10 mg/m³ (unsoluble, inhalable)
		3 mg/m³ (unsoluble, respirable) 0.5 mg/m³ (soluble, inhalable)
		0.5 mg/m (soluble, iiiilalable)
Chromium (7440-47-3)		
USA - ACGIH	ACGIH TWA (mg/m³)	0.5 mg/m³
USA - OSHA	OSHA PEL (TWA) (mg/m³)	1 mg/m³
USA - OSHA	Remark (OSHA)	(Chromium metal and insol. salts (as Cr)
Cobalt (7440-48-4)		
USA - ACGIH	Local name	Cobalt and inorganic compounds as Co
USA - ACGIH	ACGIH TWA (mg/m³)	0.02 mg/m³
USA - ACGIH	Remark (ACGIH)	Pneumonitis
USA - OSHA	Local name	Cobalt metal, dust, and fume (as Co)
USA - OSHA	OSHA PEL (TWA) (mg/m³)	0.1 mg/m³
Inc. (7420.00.0)	·	'
Iron (7439-89-6) None		

Niobium (7440-03-1)

Potassium titanate (12030-97-6)

None

None

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8.2. Exposure controls

Appropriate engineering controls : Use engineering controls to eliminate or reduce exposures below exposure limits. Ensure good

ventilation of the work station.

Materials for protective clothing : Flame retardant protective clothing.

Hand protection : Wear thermal protective gloves when working around hot surfaces. Eye protection : Wear goggles with suitable filter lenses when use is cutting/welding.

Respiratory protection : In case of inadequate ventilation wear respiratory protection. Use air-purifying respirator

equipped with particulate filtering cartridges.

Environmental exposure controls : Avoid release to the environment. Emissions from ventilation or work process equipment

should be checked to ensure they comply with requirements of environmental protection

legislation.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Solid

Appearance : Metallic solid.
Color : Silver Blue
Odor : odorless

Odor threshold : No data available pH : Not applicable Melting point : 1260 °C

Freezing point No data available **Boiling point** No data available Flash point No data available Relative evaporation rate (butyl acetate=1) : No data available Flammability (solid, gas) No data available **Explosive limits** : No data available Explosive properties : No data available : No data available Oxidizing properties Vapor pressure : No data available Relative density No data available Relative vapor density at 20 °C : No data available

Specific gravity / density : 8 g/cm³

Solubility : No data available
Log Pow : No data available
Auto-ignition temperature : No data available
Decomposition temperature : No data available
Viscosity : No data available
Viscosity, kinematic : No data available
Viscosity, dynamic : No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Stable at ambient temperature and under normal conditions of use.

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4. Conditions to avoid

Do not store with incompatible materials.

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10.5. Incompatible materials

Acids. Bases. Oxidizing agent.

10.6. Hazardous decomposition products

metallic oxides.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Likely routes of exposure : Dermal; During use, welding fumes are released with potential for inhalation exposure.

Acute toxicity : Not classified

Acute toxicity	: Not classified
Nickel (7440-02-0)	
LD50 oral rat	> 9000 mg/kg OECD Guideline 401
LC50 inhalation rat (mg/l)	> 10.2 mg/l/4h No effects observed
Silicon (7440-21-3)	
LD50 oral rat	> 5000 mg/kg
LD50 dermal rabbit	> 5000 mg/kg
LC50 inhalation rat (mg/l)	> 2000 mg/l/4h
Iron (7439-89-6)	
LD50 oral rat	> 5000 mg/kg
LC50 inhalation rat (mg/l)	> 5 mg/l/4h
Manganese (7439-96-5)	
LD50 oral rat	> 2000 mg/kg
LC50 inhalation rat (mg/l)	> 5.14 mg/kg
Tungsten (7440-33-7)	
LD50 oral rat	> 2000 mg/kg
LD50 dermal rat	> 2000 mg/kg
LC50 inhalation rat (mg/l)	> 5.4 lb/h
Molybdenum (7439-98-7)	
LD50 oral rat	4233 mg/kg
LD50 dermal rat	> 2000 mg/kg
LC50 inhalation rat (mg/l)	5.1 mg/l/4h
ATE US (oral)	4233.000 mg/kg
ATE US (dust, mist)	5.100 mg/l/4h
Chromium (7440-47-3)	
LD50 oral rat	> 5000 mg/kg OECD Guideline 420
LC50 inhalation rat (mg/l)	> 5.1 mg/l/4h OECD Guideline 403
Niobium (7440-03-1)	
LD50 dermal rat	> 2000 mg/kg
Caball (7440 40 4)	
Cobalt (7440-48-4)	7450 marker OFCD Cuidalina 404
LD50 oral rat	7150 mg/kg OECD Guideline 401
ATE US (oral)	> 2000 mg/kg OECD Guideline 402 as tricobalt tetraoxide 7150.000 mg/kg
Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
	: Not classified
Carcinogenicity	. INUL GIASSITIEU
Nickel (7440-02-0)	
NOAEL (chronic,oral,animal/male,2 years)	0.4 mg/kg bodyweight OECD 451 (Carcinogenicity Studies). Adrenal gland pheochromocytomas (benign and malignant) were significantly increased in exposed male.

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Nickel (7440-02-0)	
NOAEL (chronic,oral,animal/female,2 years)	0.4 mg/kg bodyweight OECD 451 (Carcinogenicity Studies). The incidence of combined (adenoma and carcinoma) cortical tumors among 0.4 mg Ni/m3 females, although statistically higher compared to the concurrent controls, falls within the historical control range; therefore, in the present study, this tumor is of uncertain relationship to nickel metal exposure.
IARC group	2B - Possibly carcinogenic to humans
National Toxicology Program (NTP) Status	3 - Reasonably anticipated to be Human Carcinogen
Chromium (7440-47-3)	
IARC group	3 - Not classifiable
National Toxicology Program (NTP) Status	Not listed in carcinogenicity class
Cobalt (7440-48-4)	
IARC group	2B - Possibly carcinogenic to humans
Reproductive toxicity	: Not classified
Specific target organ toxicity (single exposure)	: Not classified
Specific target organ toxicity (repeated exposure)	: Not classified
Nickel (7440-02-0)	
LOAEL (inhalation,rat,dust/mist/fume,90 days)	0.1 mg/l/6h/day OECD Guideline 451
NOAEL (oral,rat,90 days)	< 4 mg/kg bodyweight/day OECD Guideline 412. increased incidence of granulomatous inflammation and mucoid exudate.
NOAEL (inhalation,rat,dust/mist/fume,90 days)	> 10.2 mg/l/6h/day
Aspiration hazard	: Not classified
Potential Adverse human health effects and	: Irritation to eyes, skin and respiratory tract. Exposure to metal dusts and oxides may cause
symptoms	metal fume fever. Metal fume fever is a temporary flu-like condition characterized by chills, fever, muscle aches and pains, nausea and vomiting. Typically the symptoms appear within a few hours after exposure and subside within 2-3 days with no permanent effects.
symptoms	metal fume fever. Metal fume fever is a temporary flu-like condition characterized by chills, fever, muscle aches and pains, nausea and vomiting. Typically the symptoms appear within a
symptoms	metal fume fever. Metal fume fever is a temporary flu-like condition characterized by chills, fever, muscle aches and pains, nausea and vomiting. Typically the symptoms appear within a few hours after exposure and subside within 2-3 days with no permanent effects. Prolonged overexposure may cause ulceration of the skin and perforation of the nasal septum,
Symptoms/injuries after inhalation	metal fume fever. Metal fume fever is a temporary flu-like condition characterized by chills, fever, muscle aches and pains, nausea and vomiting. Typically the symptoms appear within a few hours after exposure and subside within 2-3 days with no permanent effects. Prolonged overexposure may cause ulceration of the skin and perforation of the nasal septum, dermatitis and pneumonia.
	metal fume fever. Metal fume fever is a temporary flu-like condition characterized by chills, fever, muscle aches and pains, nausea and vomiting. Typically the symptoms appear within a few hours after exposure and subside within 2-3 days with no permanent effects. Prolonged overexposure may cause ulceration of the skin and perforation of the nasal septum, dermatitis and pneumonia. Carcinogenic to humans on inhalation: Nickel. Chromium VI compounds. Dust from this product may cause irritation to the respiratory tract. Inhalation of fumes may

SECTION 12: Ecological information

12.1. Toxicity

Chronic symptoms

Nickel (7440-02-0)		
LC50 fish 1	15.3 mg/l Oncorhynchus mykiss (as nickel chloride)	
LOEC (chronic)	0.12 mg/l as Nickel(II) chloride hexahydrate	
NOEC (chronic)	0.057 mg/l as Nickel(II) chloride hexahydrate	
Iron (7439-89-6)		
LC50 fish 1	> 10000 mg/l	
Manganese (7439-96-5)		
LC50 fish 1	> 3.6 mg/l	
EC50 Daphnia 1	> 1.6 mg/l	
NOEC (acute)	3.6 mg/l	
NOEC (chronic)	1.7 mg/l	
Tungsten (7440-33-7)		
LC50 fish 1	> 200 mg/l	
NOEC (acute)	200 mg/l	
NOEC (chronic)	>= 9.8 mg/l	

: Excessive or prolonged inhalation of fumes may cause metal fume fever.

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Molybdenum (7439-98-7)		
LC50 fish 1	609 mg/l	
EC50 Daphnia 1	> 1000 mg/l	
NOEC chronic fish > 19.5 mg/l		
Cobalt (7440-48-4)		
LC50 fish 1	275 mg/l	
LOEC (chronic)	53.6 mg/l as cobalt dichloride	
NOEC (chronic)	31.1 mg/l 28 d as cobalt dichloride	

12.2. Persistence and degradability

Nickel (7440-02-0)	
Persistence and degradability	Not established.

12.3. Bioaccumulative potential

Nickel (7440-02-0)	
NICKEI (7440-02-0)	
Bioconcentration factor (BCF REACH)	> 600
Bioaccumulative potential	Expected to bioaccumulate. Not established.
Silicon (7440-21-3)	
Bioaccumulative potential	Not expected to bioaccumulate.
0 1 1/ (7 1 1 0 1 0 1)	
Cobalt (7440-48-4)	
Bioconcentration factor (BCF REACH)	< 73

12.4. Mobility in soil

Bioaccumulative potential

Eureka Cobalt Base MIG Wires and TIG Rods 706, 6, 12, 1, 21, X, MF-201, and 25		
Mobility in soil Not mobile.		

Not expected to bioaccumulate.

12.5. Other adverse effects

Effect on the global warming : No known ecological damage caused by this product.

Other information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional legislation (waste) : Disposal must be done according to official regulations.

Waste disposal recommendations : Collect as much as possible in a clean container for (preferable) reuse or disposal. Dispose in a safe manner in accordance with local/national regulations.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Not considered a dangerous good for transport regulations

TDG

No additional information available

Transport by sea

No additional information available

Air transport

No additional information available

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SECTION 15: Regulatory information

15.1. US Federal regulations

Nickel (7440-02-0)

Listed on the United States TSCA (Toxic Substances Control Act) inventory Subject to reporting requirements of United States SARA Section 313

Silicon (7440-21-3)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Iron (7439-89-6)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Manganese (7439-96-5)

Listed on the United States TSCA (Toxic Substances Control Act) inventory Subject to reporting requirements of United States SARA Section 313

Carbon (7440-44-0)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Tungsten (7440-33-7)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Molybdenum (7439-98-7)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Chromium (7440-47-3)

Subject to reporting requirements of United States SARA Section 313 Listed on the United States TSCA (Toxic Substances Control Act) inventory

Niobium (7440-03-1)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Cobalt (7440-48-4)

Subject to reporting requirements of United States SARA Section 313 Listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2. International regulations

CANADA

Nickel (7440-02-0)

Listed on the Canadian DSL (Domestic Sustances List)

Silicon (7440-21-3)

Listed on the Canadian DSL (Domestic Sustances List)

Iron (7439-89-6)

Listed on the Canadian DSL (Domestic Sustances List)

Manganese (7439-96-5)

Listed on the Canadian DSL (Domestic Sustances List)

Carbon (7440-44-0)

Listed on the Canadian DSL (Domestic Sustances List)

Tungsten (7440-33-7)

Listed on the Canadian DSL (Domestic Sustances List)

Molybdenum (7439-98-7)

Listed on the Canadian DSL (Domestic Sustances List)

Chromium (7440-47-3)

Listed on the Canadian DSL (Domestic Sustances List)

Niobium (7440-03-1)

Listed on the Canadian DSL (Domestic Sustances List)

Cobalt (7440-48-4)

Listed on the Canadian DSL (Domestic Sustances List)

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EU-Regulations

All components are listed on the EEC inventory European Inventory of Existing Commercial Chemical Substances (EINECS).

National regulations

Nickel (7440-02-0)

Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)

Listed on NZIoC (New Zealand Inventory of Chemicals)

Listed on KECI (Korean Existing Chemicals Inventory)

Listed on Taiwan National Chemical Inventory

Listed on the AICS (Australian Inventory of Chemical Substances)

Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)

Silicon (7440-21-3)

Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)

Listed on NZIoC (New Zealand Inventory of Chemicals)

Listed on KECI (Korean Existing Chemicals Inventory)

Listed on Taiwan National Chemical Inventory

Listed on the AICS (Australian Inventory of Chemical Substances)

Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)

Iron (7439-89-6)

Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)

Listed on NZIoC (New Zealand Inventory of Chemicals)

Listed on KECI (Korean Existing Chemicals Inventory)

Listed on Taiwan National Chemical Inventory

Listed on the AICS (Australian Inventory of Chemical Substances)

Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)

Manganese (7439-96-5)

Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)

Listed on NZIoC (New Zealand Inventory of Chemicals)

Listed on KECI (Korean Existing Chemicals Inventory)

Listed on Taiwan National Chemical Inventory

Listed on the AICS (Australian Inventory of Chemical Substances)

Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)

Carbon (7440-44-0)

Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)

Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory

Listed on KECI (Korean Existing Chemicals Inventory)

Listed on Taiwan National Chemical Inventory

Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)

Listed on the AICS (Australian Inventory of Chemical Substances)

Listed on NZIoC (New Zealand Inventory of Chemicals)

Tungsten (7440-33-7)

Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)

Listed on KECI (Korean Existing Chemicals Inventory)

Listed on Taiwan National Chemical Inventory

Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)

Listed on the AICS (Australian Inventory of Chemical Substances)

Listed on NZIoC (New Zealand Inventory of Chemicals)

Molybdenum (7439-98-7)

Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)

Listed on NZIoC (New Zealand Inventory of Chemicals)

Listed on KECI (Korean Existing Chemicals Inventory)

Listed on Taiwan National Chemical Inventory

Listed on the AICS (Australian Inventory of Chemical Substances)

Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)

Chromium (7440-47-3)

Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)

Listed on NZIoC (New Zealand Inventory of Chemicals)

Listed on KECI (Korean Existing Chemicals Inventory)

Listed on Taiwan National Chemical Inventory

Listed on the AICS (Australian Inventory of Chemical Substances)

Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)

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Niobium (7440-03-1)

Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)

Listed on NZIoC (New Zealand Inventory of Chemicals)

Listed on KECI (Korean Existing Chemicals Inventory)

Listed on Taiwan National Chemical Inventory

Listed on the AICS (Australian Inventory of Chemical Substances)

Not listed on Phillipines Inventory of Chemicals and Chemical Substances (PICCS)

Cobalt (7440-48-4)

Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)

Listed on NZIoC (New Zealand Inventory of Chemicals)

Listed on KECI (Korean Existing Chemicals Inventory)

Listed on Taiwan National Chemical Inventory

Listed on the AICS (Australian Inventory of Chemical Substances)

Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)

15.3. US State regulations

Nickel (7440-02-0)				
U.S California - Proposition 65 - Carcinogens List	U.S California - Proposition 65 - Developmental Toxicity	U.S California - Proposition 65 - Reproductive Toxicity - Female	U.S California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	No	No	No	

Cobalt (7440-48-4)				
U.S California - Proposition 65 - Carcinogens List	U.S California - Proposition 65 - Developmental Toxicity	U.S California - Proposition 65 - Reproductive Toxicity - Female	U.S California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	No	No	No	

Nickel (7440-02-0)

- U.S. Minnesota Hazardous Substance List
- U.S. New Jersey Right to Know Hazardous Substance List
- U.S. New York Right to Know List of Hazardous Chemicals
- U.S. Pennsylvania List of Hazardous Substances

Silicon (7440-21-3)

- U.S. New Jersey Right to Know Hazardous Substance List
- U.S. Minnesota Hazardous Substance List

Manganese (7439-96-5)

- U.S. New Jersey Right to Know Hazardous Substance List
- U.S. New York Right to Know List of Hazardous Chemicals
- U.S. Minnesota Hazardous Substance List

Tungsten (7440-33-7)

U.S. - New Jersey - Right to Know Hazardous Substance List

Molybdenum (7439-98-7)

- U.S. New Jersey Right to Know Hazardous Substance List
- U.S. New York Right to Know List of Hazardous Chemicals

Chromium (7440-47-3)

- U.S. Minnesota Hazardous Substance List
- U.S. New Jersey Right to Know Hazardous Substance List
- U.S. Pennsylvania List of Hazardous Substances

Cobalt (7440-48-4)

- U.S. Minnesota Hazardous Substance List
- U.S. New Jersey Right to Know Hazardous Substance List
- U.S. New York Right to Know List of Hazardous Chemicals

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Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 16: Other information

Indication of changes : GHS classification information. Revised sections: 1 - 16.

Revision date : 11/10/2015

Data sources : ACGIH (American Conference of Government Industrial Hygienists).

European Chemicals Agency (ECHA) Registered Substances list.
European Standards: Personal Protective Equipment; accessed at:

http://ec.europa.eu/enterprise/policies/european-standards/harmonised-standards/personal-

protective-equipment/index en.htm

Internal Company test data.

US National Library of Medicine National Institutes of Health Haz-Map. Accessed at

http://hazmap.nlm.nih.gov

Abbreviations and acronyms : ACGIH (American Conference of Government Industrial Hygienists).

ATE: Acute Toxicity Estimate.

CAS: CAS (Chemical Abstracts Service) number.

EC50: Environmental Concentration associated with a response by 50% of the test population.

GHS: Globally Harmonized System (of Classification and Labeling of Chemicals).

LD50: Lethal Dose for 50% of the test population.

LOAEL: Lowest Observed Adverse Effect Level.

NOEC: No Observable Effect Concentration.

PBT: Persistent, Bioaccumulative, Toxic.

SDS: Safety Data Sheet.

TSCA: Toxic Substances Control Act. TWA: Time Weighted Average.

vPvB: Very Persistent and Very Bioaccumulative

Full text of H-phrases:

cxt of fi-piliases.		
Carc. 2	Carcinogenicity Category 2	
Resp. Sens. 1	Respiratory sensitisation Category 1	
Skin Sens. 1	Skin sensitization Category 1	
STOT RE 1	Specific target organ toxicity (repeated exposure) Category 1	
H317	May cause an allergic skin reaction	
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled	
H351	Suspected of causing cancer	
H372	Causes damage to organs through prolonged or repeated exposure	

SDS US (GHS HazCom 2012)

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This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product

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