Safety Data Sheet

Issue date 26-Sep-2018 **Revision date** 22-Jan-2020 **Revision Number** 2

1. IDENTIFICATION

Product identification

Product identifier	Regency® End Brush
Other means of identification	91988
Recommended use	Abrasive
Restrictions on use	For industrial use only, Restricted to professional users

Supplier

Corporate Headquarters:
Lawson Products, Inc.
8770 W. Bryn Mawr Ave., Suite 900
Chicago, IL 60631
(866) 837-9908

Canadian Distribution Center:
Lawson Canada
7315 Rapistan Court
Mississauga, ON L5N 5Z4
(800) 323-5922

24 Hour Emergency Phone Number (888) 426-4851 (Prosar)

Website https://www.lawsonproducts.com

2. HAZARD(S) IDENTIFICATION

Hazard Classification While this material is not classified as hazardous under OSHA, GHS or WHMIS 2015 regulations, this SDS contains valuable information critical to the safe handling and proper use of this product. This SDS should be retained and available for employees and other users of this product.

Symbol Not applicable

Signal word Not applicable

Hazard statements Not applicable

Precautionary statements

Response Not applicable

Storage Not applicable

Disposal Not applicable

Hazard(s) Not Otherwise Classified (HNOC) Not applicable.

Physical Hazards Not Otherwise Classified (PHNOC) Not applicable.

Unknown acute toxicity None known.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Composition This product is classified as an "article" according to Title 29 of the Code of Federal Regulations, OSHA Part 1910.1200. "Article means a manufactured item other than a fluid or particle, which is formed to a specific shape or design during manufacture which has end use function dependent in whole or in part upon its shape or design during end use, and which under normal conditions of use does not release more than very small quantities or trace amounts of a hazardous chemical, and does not pose a physical hazard or health risk to employees.".

Chemical name	CAS-No	Weight %
Iron	7439-89-6	< 99
Nickel	7440-02-0	0-35
Chromium	7440-47-3	<35
Manganese	7439-96-5	15
Molybdenum	7439-98-7	<10
Tungsten	7440-33-7	<6.5
Copper	7440-50-8	<5
Vanadium	7440-62-2	<4.5
Cobalt	7440-48-4	<4.5
Titanium	7440-32-6	<2.5
Silicon	7440-21-3	<2.5
Columbium	7440-03-1	<1.1
Aluminum	7429-90-5	0-2.0
Phosphorus	7723-14-0	<0.45
Sulfur	7704-34-9	<0.45
Tin	7440-31-5	<0.05
Tantalum	7440-25-7	<0.02
Boron	7440-42-8	<0.01

4. FIRST-AID MEASURES

Necessary first-aid measures

General Information For further assistance, contact your local Poison Control Center.

Inhalation Remove to fresh air. If breathing is difficult, give oxygen. Seek medical attention.

Ingestion Seek medical attention.

Skin contact Wash area thoroughly with soap and water. Seek medical attention if irritation occurs.

Eye contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If eye irritation persists, consult a specialist.

Most important symptoms (acute) May cause eye irritation. May cause respiratory irritation. Coughing. Shortness of breath. Prolonged inhalation of high concentration of dust may cause adverse effects on the lungs. May cause skin irritation. Dust may cause abrasion.

Most important symptoms (over-exposure) None known.

Indication of any immediate medical attention and Not applicable.

special treatment needed

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media Dry chemical. Foam. Water. Carbon dioxide (CO2).

Unsuitable extinguishing media Not available.

Specific hazards None known.

Special protective equipment for fire-fighters In the event of fire, wear self-contained breathing apparatus and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures Wear appropriate protective equipment and clothing during cleanup.

Methods and materials for containment and cleaning up Pick up and transfer to properly labeled containers.

7. HANDLING AND STORAGE

Precautions for safe handling Do not breathe dust/fume/gas/mist/vapors/spray. Handle with care to avoid stings or cuts.

Conditions for safe storage, including any incompatibilities Keep at temperature between 0°C and 40°C degrees. Store at 55-66% air humidity.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Chemical name	OSHA PEL (TWA)	ACGIH OEL (TWA)	NIOSH - TWA
Iron	-	-	-
Nickel	1 mg/m³ TWA	1.5 mg/m³ TWA	0.015 mg/m³ TWA 0.015 mg/m³ TWA
Chromium	1 mg/m³ TWA	0.5 mg/m³ TWA	0.5 mg/m³ TWA
Manganese	5 mg/m³ Ceiling	0.02 mg/m³ TWA 0.1 mg/m³ TWA	3 mg/m³ STEL 1 mg/m³ TWA 1 mg/m³ TWA
Molybdenum	15 mg/m³ TWA	10 mg/m³ TWA 3 mg/m³ TWA	-
Tungsten	-	3 mg/m³ TWA	10 mg/m³ STEL 5 mg/m³ TWA 5 mg/m³ TWA
Copper	0.1 mg/m³ TWA 1 mg/m³ TWA	0.2 mg/m³ TWA 1 mg/m³ TWA	1 mg/m³ TWA 0.1 mg/m³ TWA 1 mg/m³ TWA
Vanadium	0.5 mg/m³ Ceiling 0.1 mg/m³ Ceiling	-	3 mg/m³ STEL 1 mg/m³ TWA
Cobalt	0.1 mg/m³ TWA	0.02 mg/m³ TWA	0.05 mg/m³ TWA
Titanium	-	-	-
Silicon	15 mg/m³ TWA 5 mg/m³ TWA	-	10 mg/m³ TWA 5 mg/m³ TWA
Columbium	-	-	-
Aluminum	15 mg/m³ TWA 5 mg/m³ TWA	1 mg/m³ TWA	10 mg/m³ TWA 5 mg/m³ TWA 5 mg/m³ TWA 5 mg/m³ TWA
Phosphorus	-	-	-

Chemical name	OSHA PEL (TWA)	ACGIH OEL (TWA)	NIOSH - TWA
Sulfur	-	-	-
Tin	2 mg/m³ TWA	2 mg/m³ TWA	2 mg/m³ TWA 2 mg/m³ TWA
Tantalum	5 mg/m³ TWA	-	10 mg/m³ STEL 5 mg/m³ TWA
Boron	-	-	-

Appropriate engineering controls

Adequate ventilation should be provided to keep exposure levels below current acceptable exposure limits. Consider potential exposure to components of the base materials or coatings being ground or cut.

Individual protection measures, such as personal protective equipment

Eye protection

ANSI approved safety glasses or splash goggles with face shield are recommended.

Hearing Protection

Use hearing protection if operations are noisy.

Skin and body protection

Wear suitable protective clothing. Leather gloves.

Respiratory protection

Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Consider potential exposure to components of the base materials or coatings being ground or cut. Respiratory protection must be provided in accordance with current local regulations.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice.

Canadian Province Occupational Exposure Limits

Chemical name	Alberta OEL	British Columbia OEL	Manitoba OEL	New Brunswick - OEL	Newfoundland & Labrador - OEL	Nova Scotia - OEL	Ontario OEL	Prince Edward Island - OEL	Quebec OEL	Saskatchewan - OEL
Iron	-	-	-	-	-	-	-	-	-	-
Nickel	1.5 mg/m³ TWA	0.05mg/m³TWA	1.5 mg/m³ TWA	1 mg/m³ TWA	1.5 mg/m³ TWA	1.5 mg/m³ TWA	1 mg/m³ TWA	1.5 mg/m³ TWA	1 mg/m³ TWAEV	3 mg/m³ STEL 1.5 mg/m³ TWA
Chromium	0.5 mg/m³ TWA	0.5mg/m³TWA	0.5 mg/m³ TWA	0.5 mg/m³ TWA	0.5 mg/m³ TWA	0.5 mg/m³ TWA	0.5 mg/m³ TWA	0.5 mg/m³ TWA	0.5 mg/m³ TWAEV	1.5 mg/m³ STEL 0.5 mg/m³ TWA
Manganese	0.2 mg/m³ TWA	0.2mg/m³TWA 0.02mg/m³	0.02 mg/m³ TWA 0.1 mg/m³ TWA	0.2 mg/m³ TWA	0.02 mg/m³ TWA 0.1 mg/m³ TWA 0.02 mg/m³ TWA 0.1 mg/m³ TWA	0.02 mg/m³ TWA 0.1 mg/m³ TWA	0.2 mg/m³ TWA 0.02 mg/m³ TWA 0.1 mg/m³ TWA	0.02 mg/m³ TWA 0.1 mg/m³ TWA 0.02 mg/m³ TWA 0.1 mg/m³ TWA	0.2 mg/m³ TWAEV 0.2 mg/m³ TWAEV	0.6 mg/m³ STEL 0.2 mg/m³ TWA 0.2 mg/m³ TWA
Molybdenum	10 mg/m³ TWA 3 mg/m³ TWA	3mg/m³TWA 10mg/m³TWA	3 mg/m³ TWA 10 mg/m³ TWA	10 mg/m³ TWA	3 mg/m³ TWA 10 mg/m³ TWA 3 mg/m³ TWA 10 mg/m³ TWA	3 mg/m³ TWA 10 mg/m³ TWA	10 mg/m³ TWA 3 mg/m³ TWA 10 mg/m³ TWA 3 mg/m³ TWA	3 mg/m³ TWA 10 mg/m³ TWA 3 mg/m³ TWA 10 mg/m³ TWA	10 mg/m³ TWAEV	20 mg/m³ STEL 6 mg/m³ STEL 10 mg/m³ TWA 3 mg/m³ TWA 10 mg/m³ TWA 3 mg/m³ TWA
Tungsten	10 mg/m³ STEL	10mg/m³STEL	3 mg/m³ TWA	10 mg/m³ STEL	3 mg/m³ TWA 3	3 mg/m³ TWA	10 mg/m³ STEL	3 mg/m³ TWA 3	10 mg/m³ STEV	10 mg/m³ STEL

Chemical name	Alberta OEL	British Columbia OEL	Manitoba OEL	New Brunswick - OEL	Newfoundland & Labrador - OEL	Nova Scotia - OEL	Ontario OEL	Prince Edward Island - OEL	Quebec OEL	Saskatchewan - OEL
	5 mg/m³ TWA	5mg/m³TWA		5 mg/m³ TWA	mg/m³ TWA		5 mg/m³ TWA 5 mg/m³ TWA	mg/m³ TWA	5 mg/m³ TWAEV	5 mg/m³ TWA 5 mg/m³ TWA
Copper	0.2 mg/m³ TWA 1 mg/m³ TWA	1mg/m³TWA 0.2mg/m³TWA	0.2 mg/m³ TWA 1 mg/m³ TWA	0.2 mg/m³ TWA 1 mg/m³ TWA	0.2 mg/m³ TWA 1 mg/m³ TWA	0.2 mg/m³ TWA 1 mg/m³ TWA	0.2 mg/m³ TWA 1 mg/m³ TWA	0.2 mg/m³ TWA 1 mg/m³ TWA	0.2 mg/m³ TWAEV 1 mg/m³ TWAEV	0.6 mg/m³ STEL 3 mg/m³ STEL 0.2 mg/m³ TWA 1 mg/m³ TWA
Vanadium	-	-	-	-	-	-	-	-	-	-
Cobalt	0.02 mg/m³ TWA	0.02mg/m³TWA	0.02 mg/m³ TWA	0.02 mg/m³ TWA	0.02 mg/m³ TWA 0.02 mg/m³ TWA	0.02 mg/m³ TWA	0.02 mg/m³ TWA 0.02 mg/m³ TWA	0.02 mg/m³ TWA 0.02 mg/m³ TWA	0.02 mg/m³ TWAEV 0.02 mg/m³ TWAEV	0.06 mg/m³ STEL 0.02 mg/m³ TWA 0.02 mg/m³ TWA
Titanium	-	-	-	-	-	-	-	-	-	-
Silicon	-	10mg/m³TWA 3mg/m³TWA	-	10 mg/m³ TWA	-	-	-	-	10 mg/m³ TWAEV	20 mg/m³ STEL 10 mg/m³ TWA
Columbium	-	-	-	-	-	-	-	-	-	-
Aluminum	10 mg/m³ TWA 5 mg/m³ TWA	1.0mg/m³TWA	1 mg/m³ TWA	10 mg/m³ TWA 5 mg/m³ TWA	1 mg/m³ TWA	1 mg/m³ TWA	1 mg/m³ TWA	1 mg/m³ TWA	10 mg/m³ TWAEV 5 mg/m³ TWAEV 5 mg/m³ TWAEV	20 mg/m³ STEL 10 mg/m³ STEL 10 mg/m³ TWA 5 mg/m³ TWA
Phosphorus	0.1 mg/m³ TWA	-	-	0.02 ppm TWA 0.1 mg/m³ TWA	-	-	-	-	0.1 mg/m³ TWAEV	-
Sulfur	10 mg/m³ TWA	-	-	-	-	-	-	-	-	-
Tin	2 mg/m³ TWA	2mg/m³TWA	2 mg/m³ TWA	2 mg/m³ TWA	2 mg/m³ TWA 2 mg/m³ TWA	2 mg/m³ TWA	2 mg/m³ TWA 2 mg/m³ TWA	2 mg/m³ TWA 2 mg/m³ TWA	2 mg/m³ TWAEV 2 mg/m³ TWAEV	4 mg/m³ STEL 2 mg/m³ TWA 2 mg/m³ TWA
Tantalum	5 mg/m³ TWA	5mg/m³TWA	-	5 mg/m³ TWA	-	-	-	-	5 mg/m³ TWAEV	10 mg/m³ STEL 5 mg/m³ TWA
Boron	-	-	-	-	-	-	-	-	-	-

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state Solid

Color Silver

Odor Odorless

Odor threshold Not available

pH Not available

Melting point/range °C Not available

Melting point/range °F Not available

Boiling point/range °C	Not available
Boiling point/range °F	Not available
Flash point °C / °F	Not available
Evaporation rate	Not available
Flammability (Solid, Gas)	Not available
Lower explosion limit	Not available
Upper explosion limit	Not available
Vapor pressure	Not available
Vapor density	Not available
Relative density	7
Solubility	insoluble
Partition coefficient (n-octanol/water)	Not available
Autoignition temperature °C	Not available
Autoignition temperature °F	Not available
Decomposition temperature °C	Not available
Decomposition temperature °F	Not available
Viscosity	Not available

10. STABILITY AND REACTIVITY

Reactivity	Not available.
Chemical stability	Stable under normal conditions.
Possibility of hazardous reactions	None under normal conditions of use.
Conditions to avoid	None known.
Incompatible materials	None known.
Hazardous decomposition products	Thermal decomposition can lead to release of irritating and toxic gases and vapors. Hazardous Thermal Decomposition Products:. Iron oxide fume. Manganese. Nickel. Chromium. Molybdenum. copper. Vanadium Pentoxide.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure	Product does not present an acute toxicity hazard based on known information.
Symptoms	Not classified.
Delayed and immediate effects as well as chronic effects from	Not classified.

short and long-term exposure

Numerical measures of toxicity

Chemical name	Inhalation LC50:	Dermal LD50:	Oral LD50:
Iron	-	-	= 30 g/kg (Rat)
Nickel	> 10.2 mg/L (Rat) 1 h	-	> 9000 mg/kg (Rat)
Chromium	-	-	-
Manganese	-	-	= 9 g/kg (Rat)
Molybdenum	-	-	-
Tungsten	-	-	-
Copper	-	-	-
Vanadium	-	-	> 2000 mg/kg (Rat)
Cobalt	> 10 mg/L (Rat) 1 h	-	= 6171 mg/kg (Rat)
Titanium	-	-	-
Silicon	-	-	= 3160 mg/kg (Rat)
Columbium	-	-	-
Aluminum	-	-	-
Phosphorus	= 4.3 mg/L (Rat) 1 h	= 100 mg/kg (Rat)	= 3030 µg/kg (Rat)
Sulfur	> 9.23 mg/L (Rat) 4 h	> 2000 mg/kg (Rabbit)	> 3000 mg/kg (Rat)
Tin	-	-	= 700 mg/kg (Rat)
Tantalum	-	-	-
Boron	-	-	= 650 mg/kg (Rat)

ATEmix (dermal) Not available

ATEmix (oral) Not available

ATEmix (inhalation-gas) Not available

ATEmix (inhalation-vapor) Not available

ATEmix (inhalation-dust/mist) Not available

Carcinogenicity

Chemical name	ACGIH OEL - Carcinogens	IARC	OSHA RTK Carcinogens	NTP
Iron	-	-	-	-
Nickel	-	Group 1 Group 2B	Listed	Known Carcinogen Reasonably Anticipated Carcinogen
Chromium	A4	Group 3	-	-
Manganese	A4	-	-	-
Molybdenum	-	-	-	-
Tungsten	-	-	-	-
Copper	-	-	-	-
Vanadium	-	-	-	-
Cobalt	A3	Group 2B	Listed	Reasonably Anticipated Carcinogen
Titanium	-	-	-	-
Silicon	-	-	-	-
Columbium	-	-	-	-
Aluminum	A4	-	-	-
Phosphorus	-	-	-	-

Chemical name	ACGIH OEL - Carcinogens	IARC	OSHA RTK Carcinogens	NTP
Sulfur	-	-	-	-
Tin	-	-	-	-
Tantalum	-	-	-	-
Boron	-	-	-	-

Canadian Province carcinogenicity limits

Chemical name	Alberta - Carcinogen	British Columbia - Carcinogen	Manitoba - Carcinogen	New Brunswick - Carcinogen	Nova Scotia - Carcinogen	Quebec - Carcinogen
Iron	-	-	-	-	-	-
Nickel	-	IARC 2B	ACGIH A5	-	ACGIH A5	-
Chromium	-	-	ACGIH A4	ACGIH A4	ACGIH A4	-
Manganese	-	-	ACGIH A4	-	ACGIH A4	-
Molybdenum	-	-	-	-	-	-
Tungsten	-	-	-	-	-	-
Copper	-	-	-	-	-	-
Vanadium	-	-	-	-	-	-
Cobalt	-	IARC 2B	ACGIH A3	ACGIH A3	ACGIH A3	C3 carcinogen
Titanium	-	-	-	-	-	-
Silicon	-	-	-	-	-	-
Columbium	-	-	-	-	-	-
Aluminum	-	-	ACGIH A4	-	ACGIH A4	-
Phosphorus	-	-	-	-	-	-
Sulfur	-	-	-	-	-	-
Tin	-	-	-	-	-	-
Tantalum	-	-	-	-	-	-
Boron	-	-	-	-	-	-

12. ECOLOGICAL INFORMATION

Ecotoxicity

Chemical name	Algae/aquatic plants	Fish
Iron	-	13.6: 96 h Morone saxatilis mg/L LC50 static
Nickel	0.18: 72 h Pseudokirchneriella subcapitata mg/L EC50 0.174 - 0.311: 96 h Pseudokirchneriella subcapitata mg/L EC50 static	100: 96 h Brachydanio rerio mg/L LC50 10.4: 96 h Cyprinus carpio mg/L LC50 static 1.3: 96 h Cyprinus carpio mg/L LC50 semi-static
Chromium	-	-
Manganese	-	-
Molybdenum	-	-
Tungsten	-	-
Copper	0.0426 - 0.0535: 72 h Pseudokirchneriella subcapitata mg/L EC50 static 0.031 - 0.054: 96 h Pseudokirchneriella subcapitata mg/L EC50 static	0.0068 - 0.0156: 96 h Pimephales promelas mg/L LC50 0.2: 96 h Pimephales promelas mg/L LC50 flow-through 0.3: 96 h Pimephales promelas mg/L LC50 static 0.3: 96 h Cyprinus carpio mg/L LC50 semi-static 0.052: 96 h Oncorhynchus mykiss mg/L LC50 flow-through 0.112: 96 h Poecilia reticulata mg/L LC50 flow-through 1.25: 96 h Lepomis macrochirus mg/L LC50 static 0.8: 96 h Cyprinus carpio mg/L LC50 static
Vanadium	-	-
Cobalt	-	100: 96 h Brachydanio rerio mg/L LC50 static
Titanium	-	-
Silicon	-	-

Chemical name	Algae/aquatic plants	Fish
Columbium	-	-
Aluminum	-	-
Phosphorus	-	0.0017 - 0.0035: 96 h Lepomis macrochirus mg/L LC50 flow-through 0.001 - 0.004: 96 h Lepomis macrochirus mg/L LC50 static 100: 96 h Brachydanio rerio mg/L LC50 static 0.015 - 0.032: 96 h Oncorhynchus mykiss mg/L LC50 static 0.011 - 0.028: 96 h Pimephales promelas mg/L LC50 static
Sulfur	-	866: 96 h Brachydanio rerio mg/L LC50 static 14: 96 h Lepomis macrochirus mg/L LC50 static 180: 96 h Oncorhynchus mykiss mg/L LC50 static
Tin	-	-
Tantalum	-	-
Boron	-	-

Persistence and degradability No data available.

Bioaccumulation

Chemical name	CAS-No	Partition coefficient (log Kow)
Iron 7439-89-6	7439-89-6	-
Nickel 7440-02-0	7440-02-0	-
Chromium 7440-47-3	7440-47-3	-
Manganese 7439-96-5	7439-96-5	-
Molybdenum 7439-98-7	7439-98-7	-
Tungsten 7440-33-7	7440-33-7	-
Copper 7440-50-8	7440-50-8	-
Vanadium 7440-62-2	7440-62-2	-
Cobalt 7440-48-4	7440-48-4	-
Titanium 7440-32-6	7440-32-6	-
Silicon 7440-21-3	7440-21-3	-
Columbium 7440-03-1	7440-03-1	-
Aluminum 7429-90-5	7429-90-5	-
Phosphorus 7723-14-0	7723-14-0	-
Sulfur 7704-34-9	7704-34-9	-
Tin 7440-31-5	7440-31-5	-
Tantalum 7440-25-7	7440-25-7	-
Boron 7440-42-8	7440-42-8	-

Mobility in soil Not available.

Other adverse effects None known

13. DISPOSAL CONSIDERATIONS

Disposal information Collect, transport, store or dispose in accordance with local, state, provincial and federal regulations.

Contaminated packaging Dispose in accordance with local, state and federal regulations.

14. TRANSPORTATION INFORMATION

Shipping Descriptions

DOT
Proper shipping name Not regulated

TDG
Proper shipping name Not regulated

IATA
Proper shipping name Not regulated

IMDG/IMO
Proper shipping name Not regulated

Marine Pollutants

Chemical name	CAS-No	USDOT Marine Pollutant	Canada TDG Marine Pollutant	IMDG Marine Pollutant
Iron	7439-89-6	-	-	-
Nickel	7440-02-0	-	-	-
Chromium	7440-47-3	-	-	-
Manganese	7439-96-5	-	-	-
Molybdenum	7439-98-7	-	-	-
Tungsten	7440-33-7	-	-	-
Copper	7440-50-8	X	-	X
Vanadium	7440-62-2	-	-	-
Cobalt	7440-48-4	-	-	-
Titanium	7440-32-6	-	-	-
Silicon	7440-21-3	-	-	-
Columbium	7440-03-1	-	-	-
Aluminum	7429-90-5	-	-	-
Phosphorus	7723-14-0	-	-	-
Sulfur	7704-34-9	-	-	-
Tin	7440-31-5	-	-	-
Tantalum	7440-25-7	-	-	-
Boron	7440-42-8	-	-	-

Special Precautions Multi-modal shipping descriptions are provided for informational purposes and do not consider container size. The presence of a shipping description for a particular mode of transport (sea, air, etc.), does not indicate that the product is packaged suitably for that mode of transport. All packaging must be reviewed for suitability prior to shipment, and compliance with the applicable regulations is the sole responsibility of the person offering the product for transport. People loading and unloading dangerous goods must be trained on all of the risks deriving from the substances and on all actions in case of emergency situations.

15. REGULATORY INFORMATION

State regulations

U.S. state Right-to-Know regulations

Chemical name	CAS-No	Massachusetts - RTK	New Jersey - RTK	Pennsylvania - RTK
Iron	7439-89-6	-	-	-
Nickel	7440-02-0	X	X	X
Chromium	7440-47-3	X	X	X
Manganese	7439-96-5	X	X	X
Molybdenum	7439-98-7	X	X	X
Tungsten	7440-33-7	X	X	X
Copper	7440-50-8	X	X	X
Vanadium	7440-62-2	X	X	X
Cobalt	7440-48-4	X	X	X
Titanium	7440-32-6	-	X	-
Silicon	7440-21-3	X	X	X
Columbium	7440-03-1	-	-	-
Aluminum	7429-90-5	X	X	X
Phosphorus	7723-14-0	X	X	X
Sulfur	7704-34-9	X	X	X
Tin	7440-31-5	X	X	X
Tantalum	7440-25-7	X	X	X
Boron	7440-42-8	-	X	-

California Prop. 65

WARNING: This product contains a chemical(s) known to the state of California to cause cancer, birth defects or other reproductive harm

Chemical name	CAS-No	California Prop. 65
Iron	7439-89-6	-
Nickel	7440-02-0	Carcinogen
Chromium	7440-47-3	-
Manganese	7439-96-5	-
Molybdenum	7439-98-7	-
Tungsten	7440-33-7	-
Copper	7440-50-8	-
Vanadium	7440-62-2	-
Cobalt	7440-48-4	Carcinogen
Titanium	7440-32-6	-
Silicon	7440-21-3	-
Columbium	7440-03-1	-
Aluminum	7429-90-5	-
Phosphorus	7723-14-0	-
Sulfur	7704-34-9	-
Tin	7440-31-5	-
Tantalum	7440-25-7	-
Boron	7440-42-8	-

U.S. Federal Regulations

US EPA SARA 313

Chemical name	CAS-No	CERCLA/SARA Hazardous Substances RQ	SARA 313 - Threshold Values
Iron	7439-89-6	-	-
Nickel	7440-02-0	100 lb 45.4 kg	0.1 %
Chromium	7440-47-3	5000 lb 2270 kg 10 lb 4.54 kg	1.0 %
Manganese	7439-96-5	-	1.0 %
Molybdenum	7439-98-7	-	-
Tungsten	7440-33-7	-	-
Copper	7440-50-8	5000 lb 2270 kg	1.0 %
Vanadium	7440-62-2	-	1.0 %
Cobalt	7440-48-4	-	0.1 %
Titanium	7440-32-6	-	-
Silicon	7440-21-3	-	-
Columbium	7440-03-1	-	-
Aluminum	7429-90-5	-	1.0 %
Phosphorus	7723-14-0	1 lb 0.454 kg	1.0 %
Sulfur	7704-34-9	-	-
Tin	7440-31-5	-	-
Tantalum	7440-25-7	-	-
Boron	7440-42-8	-	-

US EPA SARA 311/312 hazardous categorization Not applicable

Chemical name	DSL/NDSL	Inventory - United States - Section 8(b) Inventory (TSCA)	U.S. - TSCA (Toxic Substances Control Act) - Section 12(b) - Export Notification
Iron	X	X	-
Nickel	X	X	-
Chromium	X	X	-
Manganese	X	X	-
Molybdenum	X	X	-
Tungsten	X	X	-
Copper	X	X	-
Vanadium	X	X	-
Cobalt	X	X	-
Titanium	X	X	-
Silicon	X	X	-
Columbium	X	X	-
Aluminum	X	X	-
Phosphorus	X	X	-
Sulfur	X	X	-
Tin	X	X	-
Tantalum	X	X	-
Boron	X	X	-

Legend X - Listed

16. OTHER INFORMATION

NFPA

Health	Not available
Flammability	Not available
Instability	Not available

HMIS

Health	Not available
Flammability	Not available
Physical hazards	Not available

Notice: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks Although HMIS® ratings are not required on SDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA).

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Key to abbreviations

ACGIH (American Conference of Governmental Industrial Hygienists)
ATE (Average Toxicity Estimate)
DSL/NDSL (Domestic Substance List/Non-Domestic Substance List)
HMIS (Hazardous Materials Identification System)
IARC (International Agency for Research on Cancer)
IATA (International Air Transport Association)
IMDG/IMO (International Maritime Dangerous Goods/International Maritime Orgnaization)
NFPA (National Fire Protection Association)
NTP (National Toxicology Program)
OEL (Occupational Exposure Level)
OSHA (Occupational Safety and Health Administration of the US Department of Labor)
PEL (Permissible Exposure Limit)
TSCA (Toxic Substance Control Act)
USEPA (United States Environmental Protection Agency)

Disclaimer

The information accumulated herein is believed to be accurate, but is not warranted to be, whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances.

End of Safety Data Sheet