

**SAFETY DATA SHEET (SDS)****DUCTILE IRON AND COMPACTED GRAPHITE IRON (CGI) CASTINGS**

DATE ISSUED

March 2018

DATE REVIEWED

October 2024

**SECTION 1: PRODUCT IDENTIFICATION****PRODUCT NAME****DUCTILE IRON AND COMPACTED GRAPHITE IRON (CGI) CASTINGS****COMMON NAME AND OTHER DESIGNATIONS**

ASTM (American Society for Testing & Materials) Specification No's./ACI (Alloy Casting Institute) Alloy Designations: A395, A536, A476, A874, A897, Compacted Graphite Iron (CGI) A842

**PRODUCT IDENTIFICATION (Label Identifier)**

All Ductile Iron Part Numbers

**MANUFACTURER'S NAME**

Waupaca Foundry, Inc.

**STREET ADDRESS**

1955 Brunner Drive

**EMERGENCY TELEPHONE NO.**

715-258-6611

**MAILING ADDRESS**

P.O. Box 249

**TELEPHONE NO.**

715-258-6611

**CITY, STATE, ZIP CODE, COUNTRY**

Waupaca, WI, 54981, USA

**FAX NO.**

715-258-9268

**WEBSITE**[www.waupacafoundry.com](http://www.waupacafoundry.com)**RECOMMENDED USE OF CHEMICAL AND RESTRICTIONS ON USE**

Solid casting; no restrictions

**SECTION 2: HAZARD IDENTIFICATION****Hazard Classification**

Castings in final form, not machined or further processed by customers are considered articles and therefore do not pose a physical hazard or health risk to employees.

The following classifications and information contained in this SDS are for castings further machined or processed by customers and therefore pose a potential physical hazard or health risk to employees. Dust or fumes released during machining, grinding, drilling, melting, casting, sawing, blasting, polishing, buffing, brazing, soldering, welding or thermal cutting of the product may produce airborne contaminants that are hazardous. Dust and/or fumes released during processing may contain hexavalent chromium, magnesium, manganese, molybdenum, nickel and respirable crystalline silica. The following classification information is for the hazardous substances that could be released or generated from such processes.

**Label Elements****Signal Word****DANGER****Classification**

Skin Sensitizer 1 (H317)

Carcinogenicity 1A (H350i)  
Specific Target Organ Toxicity Single Exposure 3: Respiratory Tract Irritation (H335)  
Specific Target Organ Toxicity Single Exposure 1 (H370)  
Specific Target Organ Toxicity Repeated Exposure 1 (H372)  
Specific Target Organ Toxicity Repeated Exposure 2 (H373)

#### Pictograms



#### Hazard Statements

No adverse health effects expected if the product is handled in accordance with this Safety Data Sheet and the product label. Symptoms or effects that may arise if the product is mishandled and overexposure occurs include:

May cause an allergic skin reaction.  
May cause cancer through prolonged or repeated exposure via inhalation of fumes or respirable dust.  
May cause respiratory irritation.  
Causes damage to respiratory system through prolonged or repeated exposure.  
May cause damage to brain & nervous system through prolonged or repeated exposure.

#### Precautionary Statements

**Prevention** • Obtain, read and follow all safety instructions before use.  
Do not breathe dust or fumes.  
In case of inadequate ventilation wear respiratory protection.  
Do not eat, drink or smoke when using this product.  
Use only outdoors or in a well-ventilated area.  
Wear protective work gloves, protective clothing, eye and face protection.  
Wash hands thoroughly after handling.  
Contaminated work clothing should not be allowed out of the workplace.  
Do not touch eyes.

**Response** • IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get emergency medical help. Take off contaminated clothing and wash before reuse.  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical help.  
IF INHALED: Remove person to fresh air and keep comfortable for breathing. If exposed or concerned: Get emergency help immediately.

**Storage/Disposal** • Store locked up.  
Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

### SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

All values are expressed as weight percent and are approximate. The percent composition reflects the range that is possible in this group of products.

Chemical Name	CAS #	Wt. %
Carbon (C)	7440-44-0	3.0–4.3
Chromium (Cr)	7440-47-3	0.02–0.13
Chromium, hexavalent*	1333-82-0	*
Copper (Cu)	7440-50-8	0.01–1.5
Iron (Fe)	7439-89-6	87.7–95.1
Magnesium (Mg)	7439-95-4	0.001-0.10
Manganese (Mn)	7439-96-5	<1.2

Molybdenum (Mo)	7439-98-7	0.01-0.5
Nickel (Ni)**	7440-02-0	0.1–2
Silicon (Si)	7440-21-3	1.8–4
Silica, crystalline (SiO <sub>2</sub> )***	14808-60-7	***
Tin (Sn)	7440-31-5	0.1–0.15

### NOTES to Section 3

- \* When chromium is heated to high temperatures, which may occur during welding and thermal cutting of this product, it may oxidize to form hexavalent chromium. **In the product as sold, chromium is in the elemental form.**
- \*\* When nickel is heated to high temperatures, which may occur during welding and thermal cutting of this product, it may form nickel oxides. **In the product as sold, nickel is in the elemental form.**
- \*\*\* Castings that have not been cleaned may contain embedded sand which may release respirable crystalline silica dust during processing.



**WARNING:** This product can expose you to chemicals including nickel, silicon dioxide and hexavalent chromium, which are known to the State of California to cause cancer.

Contains less than ~3% of components with unknown acute oral toxicity, less than ~10% with unknown acute inhalation toxicity and up to 99% of components of unknown acute dermal toxicity.

## SECTION 4: FIRST AID MEASURES

**No first aid is likely to be needed when castings are handled as sold.** The following first aid measures may be needed if dust and/or fumes are released when processes such as machining, grinding, drilling, melting, casting, sawing, blasting, polishing, buffing, brazing, soldering, welding or thermal cutting are performed on the product.

**EYE CONTACT:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical help.

**SKIN CONTACT:** Wash with plenty of soap and water. If skin irritation or rash occurs: Get emergency medical help.

**INHALATION:** IF INHALED: Remove person to fresh air and keep comfortable for breathing. If exposed or concerned: Get emergency help immediately.

**INGESTION:** Health effects are not known or expected to occur under normal use. Low hazard for usual industrial or commercial handling. IF SWALLOWED: Get medical advice/attention if you feel unwell.

### Most important symptoms and effects, both acute and delayed

**No adverse effects are expected from handling castings as sold.** Inhalation of fumes or dust from processes such as machining, grinding, drilling, melting, casting, sawing, blasting, polishing, buffing, brazing, soldering, welding or thermal cutting may cause irritation of the nose, throat or eyes. Nickel compounds, hexavalent chromium compounds and respirable crystalline silica are listed in the National Toxicology Program (NTP) Annual Report on Carcinogens and the International Agency for Research on Cancer (IARC) Monographs as human carcinogens. Nickel metal is listed in the IARC Monographs as a possible carcinogen (see Section 11). Hexavalent chromium and respirable crystalline silica are considered carcinogens by the Occupational Safety & Health Administration (OSHA). Prolonged overexposure to welding or thermal cutting fumes on materials containing iron may cause siderosis (iron deposits in lungs). Nickel and hexavalent chromium may cause skin sensitization. Metal Fume Fever may result from inhalation of magnesium fumes. Metal Fume Fever is a flu-like condition consisting of fever, chills, sweating, aches, pains, cough, weakness, headache, nausea, vomiting, and breathing difficulty. Other symptoms may include metallic taste, increased white blood cell count. There is no permanent ill-effect. Manganese may cause damage to brain and nervous system through prolonged or repeated exposure. Respirable crystalline silica may cause adverse lung effects (silicosis), immune system effects and kidney effects.

### Indication of Immediate Medical Attention and Special Treatment Needs

None known

## SECTION 5: FIREFIGHTING MEASURES

### Suitable Extinguishing Media

Use suitable extinguishing methods for surrounding fire.

### Special Hazards Arising from the Substance

Not applicable for the casting as sold. Welding arcs and sparks can ignite combustibles and flammables.

### Combustion Products

Welding and thermal cutting may generate oxides of the metals listed in Section 3.

### Special Protective Actions for Firefighters

Not applicable

## SECTION 6: ACCIDENTAL RELEASE MEASURES

### Personal Precautions, Protective Equipment and Emergency Procedures

No special precautions necessary for the product as sold.

### Environmental Precautions

Avoid releasing dust generated or collected from processing castings into the environment. Report such spills as required by local and national regulations.

### Methods and Material for Containment and Clean-up

Not applicable

## SECTION 7: HANDLING & STORAGE

### Precautions for Safe Handling

**No special requirements for the product as sold.** The following precautions may be needed if processes such as machining, grinding, drilling, melting, casting, sawing, blasting, polishing, buffing, brazing, soldering, welding or thermal cutting are performed and produce dust and/or fumes: Avoid breathing fumes or dust. Use good housekeeping practices. Use adequate ventilation to control exposure to dusts and fumes below their applicable occupational exposure limits. Employee exposures should be assessed to determine what specific corrective actions may be needed when performing tasks that release dust or fumes. Take appropriate precautions to prevent fires and explosion when hot work is performed. Do not eat, smoke or drink when performing the tasks listed above.

### Conditions for Safe Storage, Including any Incompatibilities

No special storage requirements.

## SECTION 8: EXPOSURE CONTROLS & PERSONAL PROTECTION

### Occupational Exposure Limits

**This product is an article as sold.** Dust or fumes generated from machining, grinding, drilling, melting, casting, sawing, blasting, polishing, buffing, brazing, soldering, welding or thermal cutting of the product may produce contaminants with the following Occupational Exposure Limits (OELs):

Ingredient	CAS #	FEDERAL OSHA PEL* (mg/m <sup>3</sup> )	ACGIH TLV® (mg/m <sup>3</sup> )	NIOSH REL (mg/m <sup>3</sup> )
Carbon	7440-44-0	NE	NE	NE
Chromium Metal Hexavalent, insoluble**	7440-47-3	1 (TWA) 0.005 (TWA)	0.5 (TWA) 0.01 (TWA)	0.5 (TWA) 0.0002 (TWA) (Ca)
Copper Dust Fume	7440-50-8	1 (TWA) 0.1 (TWA)	1 (TWA) 0.2 (TWA)	1 (TWA) 0.1 (TWA)
Iron	7439-89-6	10 (TWA) (as iron oxide fume)	5 (TWA)(R) (as iron oxide dust or fume)	5 (TWA) (as iron oxide dust or fume)
Magnesium	7439-95-4	15 (TWA)	10 (TWA)(I) (as magnesium oxide)	NE
Manganese	7439-96-5	5 (C)	0.02 (TWA)(R) 0.1 (TWA)(I)	1 (TWA) 3 (STEL)
Molybdenum	7439-98-7	15 (TWA)	10 (TWA) (I) 3 (TWA) (R)	NE
Nickel Elemental	7440-02-0	1 (TWA)	1.5 (TWA)(I)	0.15 mg/m <sup>3</sup> (TWA) (Ca)

<b>Insoluble Oxide***</b>		1 (TWA) 1 (TWA)	0.2 (TWA) (I) 0.2 (TWA) (I)	
<b>Silicon</b>	7440-03-1	15 (TWA) 5 (TWA) (R)	NE	10 (TWA) 5 (TWA) (R)
<b>Silica, respirable crystalline</b>	14808-60-7	0.05 (TWA)****(R)	0.025 (TWA) (R)	0.05 (TWA) (Ca)
<b>Tin</b>	7440-31-5	2 (TWA)	2 (TWA)	2 (TWA)

### **NOTES to Section 8**

\* The following State OSHA Plans have adopted lower Permissible Exposure Limits (PELs) for some of the constituents in this product:

**California:** Chromium - 0.5 mg/m<sup>3</sup> (TWA); Manganese - 0.2 mg/m<sup>3</sup> (TWA); Nickel, metal - 0.5 mg/m<sup>3</sup> (TWA)

**Minnesota:** Manganese fume - 1 mg/m<sup>3</sup> (TWA); Total Welding Fumes - 5 mg/m<sup>3</sup> (TWA)

**Michigan:** Chromium - 0.5 mg/m<sup>3</sup> (TWA); manganese fume - 1 mg/m<sup>3</sup> (TWA); Total Welding Fumes - 5 mg/m<sup>3</sup> (TWA)

**Oregon:** Chromium - 0.5 mg/m<sup>3</sup> (TWA)

\*\* When chromium is heated to high temperatures, which may occur during welding and thermal cutting of this product, it may oxidize to form hexavalent chromium. In the product as sold, chromium is in the elemental form.

\*\*\* When nickel is heated to high temperatures, which may occur during welding and thermal cutting of this product, it may form nickel oxides. In the product as sold, nickel is in the elemental form.

\*\*\*\* For further information see the OSHA Respirable Crystalline Silica Standard (29 CFR 1910.1053).

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### **Exposure Limit Abbreviations**

ACGIH TLV American Conference of Governmental Industrial Hygienists Threshold Limit Value®

C Ceiling Limit

I Inhalable fraction of particulate

mg/m<sup>3</sup> Milligram of substance per cubic meter of air

NE None Established

OSHA PEL Occupational Health and Safety Administration Permissible Exposure Limit

R Respirable fraction of particulate

STEL Short Term Exposure Limit

TWA Time Weighted Average

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### **Appropriate Engineering Controls**

**As sold no special control measures are necessary.** If dust and/or fumes are released when processes such as machining, grinding, drilling, melting, casting, sawing, blasting, polishing, buffing, brazing, soldering, welding or thermal cutting are performed, adequate ventilation should be used to control exposures to dusts and fumes below their applicable occupational exposure limits. Industrial hygiene sampling should be used to determine what specific corrective actions may be needed. Take appropriate precautions to prevent fires and explosion when hot work is performed. Do not eat, smoke or drink when performing the tasks listed above.

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### **Personal Protective Equipment (PPE)**

#### **Eye Protection**

Wear safety glasses with side-shields if there is a risk of particles getting in eyes. Welding and thermal cutting of this product can generate ultraviolet and infrared radiation. Select appropriate welding shades to prevent eye injury.

#### **Skin Protection**

No chemical protective clothing is required. During use of this product, other hazards such as ultraviolet radiation, infrared radiation, hot metal and sparks may be generated. Use appropriate protective clothing and gloves for the application.

#### **Respiratory Protection**

**As sold, no respiratory protection is expected to be necessary.** If dust and/or fumes are released when processes such as machining, grinding, drilling, melting, casting, sawing, blasting, polishing, buffing, brazing, soldering, welding or thermal cutting are performed, respiratory protection may be necessary if the concentrations of the hazardous substances listed in the above Table exceed the applicable occupational exposure limits. In these cases, a National

Institute of Occupational Safety & Health (NIOSH) approved respirator should be selected based on the form and concentration of the contaminant in air.

## SECTION 9: PHYSICAL & CHEMICAL PROPERTIES

<b>Appearance</b>	Solid, gray colored material
<b>Odor</b>	Not applicable
<b>Odor threshold</b>	Not applicable
<b>pH</b>	Not applicable
<b>Melting Point</b>	~2350°F (1300°C)
<b>Boiling point</b>	5000°F (2750°C) for iron
<b>Flash Point</b>	Not applicable
<b>Evaporation Rate</b>	Not applicable
<b>Flammability</b>	Not applicable
<b>Upper/Lower Flammability or Explosive Limits</b>	Not applicable
<b>Vapor Pressure</b>	Not applicable
<b>Vapor Density</b>	Not applicable
<b>Relative Density</b>	Not applicable
<b>Solubility in Water</b>	Insoluble
<b>Partition Coefficient</b>	Not applicable
<b>Auto-Ignition Temperature</b>	Not applicable
<b>Decomposition Temperature</b>	Not applicable
<b>Viscosity</b>	Not applicable

## SECTION 10: STABILITY & REACTIVITY

### Reactivity

Inert, not reactive

### Chemical Stability

Stable

### Possibility of Hazardous Reactions

None known with the product as sold.

### Conditions to avoid

None known

### Incompatible Materials

None known

### Hazardous Decomposition Products

Welding and thermal cutting on casting may generate oxides of the metals listed in Section 3.

## SECTION 11: TOXICOLOGICAL INFORMATION

**This product is an article as sold.** Dust or fumes generated from machining, grinding, drilling, melting, casting, sawing, blasting, polishing, buffing, brazing, soldering, welding or thermal cutting of the product may produce airborne contaminants that are hazardous. Information about these components is supplied.

### Acute Toxicity

The constituents do not meet the criteria to be classified in this category.

**Carbon:** Rat (oral) LD50 = 2000 mg/kg

**Chromium:** Rat (oral) LD50 >5000 mg/kg; Rat (Inhalation) LC50 (4 hr) = 5.41 mg/L air

**Copper:** Rat (oral) LD50 = 300–2,500 mg/kg; Rat LC50 (4 hr) = 5.11 mg/L air; Rat (dermal) LD50 = 2000 mg/kg

**Hexavalent Chromium:** Rat (oral) LD50 = 52 mg/kg; Rat (inhalation) LC50 (4 hr) = 99–262 mg/m<sup>3</sup>, Rabbit (dermal) LD50 = 57 mg/kg

**Iron:** Rat (oral) LD50 = 98.6–1060 g/kg; Rat (inhalation) LC50 (6 hr) = 250 mg/m<sup>3</sup> air

**Manganese:** Rat (oral) LD50 > 2000 mg/kg; Rat (inhalation) (4 hr) LC50 > 5.14 mg/L

**Molybdenum:** Rat (oral) LD50 >5,000 mg/kg; Rat (inhalation (4 hr) LC50 > 5.84 mg/L; Rat (dermal) > 2,000 mg/kg

**Nickel:** Rat (oral) LD50 >9000 mg/kg

**Silicon:** Rat (oral) LD50 = 3160 mg/kg

LD50 = Lethal Dose of the substance at which 50% of the exposed test population is killed within a given period of time.  
LC50 = Lethal Concentration of the substance at which 50% of the exposed test population is killed within a given period of time.

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#### **Skin Corrosion/Irritation**

The constituents do not meet the criteria to be classified in this category.

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#### **Serious Eye Damage or Irritation**

Dusts and fumes may cause eye irritation but the constituents do not meet the criteria to be classified in this category.

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#### **Respiratory or Skin Sensitization**

##### **Nickel and Hexavalent Chromium**

May cause allergic skin sensitization.

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#### **Germ Cell Mutagenicity**

##### **Nickel**

Chromosomal aberrations and in vitro and in vivo testing has shown that nickel is genotoxic (ATSDR); data is insufficient for classification.

##### **Hexavalent Chromium**

Chromosomal aberrations and in vitro and in vivo testing has shown that hexavalent chromium is genotoxic (ATSDR); data is insufficient for classification.

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#### **Carcinogenicity**

##### **Carbon**

Not listed by IARC, NTP or OSHA

##### **Chromium**

Metallic chromium is not listed by IARC, NTP or OSHA. In the product as sold, chromium is in the elemental form. When chromium is heated to high temperatures such as those that occur in welding arcs or during thermal cutting processes, it can oxidize to form hexavalent chromium. Hexavalent chromium is listed by IARC as *Carcinogenic to Humans* (Group 1) and by NTP as a *Known Human Carcinogen*.

##### **Copper**

Not listed by IARC, NTP or OSHA

##### **Iron**

Not listed by IARC, NTP or OSHA

##### **Magnesium**

Not listed by IARC, NTP or OSHA

##### **Manganese**

Not listed by IARC, NTP or OSHA

##### **Molybdenum**

Not listed by IARC, NTP or OSHA

##### **Nickel**

Nickel metal is listed by IARC as *Carcinogenic to Humans* (Group 1) and by the NTP as *Reasonably Anticipated to be a Human Carcinogen*. Nickel compounds are listed by IARC as *Carcinogenic to Humans* (Group 1) and by the NTP as a *Known Human Carcinogen*. The increased risk of lung and sinus cancer varies with the form of nickel.

##### **Silicon**

Not listed by IARC, NTP or OSHA

##### **Silica, Respirable Crystalline**

Listed by IARC as *Carcinogenic to Humans* (Group 1) and by NTP as *Known to be a Human Carcinogen* and by OSHA. Respirable crystalline silica has been associated with an increased risk of lung cancer.

##### **Tin**

Not listed by IARC, NTP or OSHA

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#### **Abbreviations**

ASTDR US Agency for Toxic Substances & Disease Registry (US Dept. Health & Human Services)

ECHA European Chemicals Agency

IARC	International Agency for Research on Cancer
NTP	National Toxicology Program (U.S. National Institute of Environmental Health Sciences)
OSHA	U.S. Occupational Safety and Health Administration

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### Reproductive Toxicity

#### Nickel

Some studies indicate there may be effects on fertility but the data do not meet the criteria to be classified in this category.

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### Specific Target Organ Toxicity-Single Exposure (SE)

#### Copper

There are reports of copper fume causing "metal fume fever" resulting in symptoms of with a burning sensation, throat irritation, coughing, shortness of breath, nausea, aches and fever. These studies lack adequate exposure data and clear evidence that copper fumes caused metal fume fever. The data is inadequate for classification.

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### Specific Target Organ Toxicity-Repeated Exposure

#### Hexavalent Chromium

Chrome ulcers, nasal septum holes, inflammation of the nasal mucosa and throat, chronic bronchitis, kidney and liver effects have been reported in chrome workers. The effects result in a Specific Target Organ Toxicity-Repeat or Prolonged Exposure (STOT-RE) Category 1 classification.

#### Iron

Prolonged exposure may result in iron deposits in the lung, a condition known as siderosis but does not meet the criteria to be classified in this category.

#### Manganese

Inflammatory changes in the lung were found in monkeys exposed to manganese dioxide via inhalation for 10 months. At high exposure levels (greater than 5 mg/m<sup>3</sup>), manganism (chronic manganese poisoning) has been reported in workers. Symptoms of manganism include sleepiness, weakness in the legs, a mask-like facial appearance, emotional disturbances and a spastic gait. High levels of pneumonia have also been reported in workers inhaling large amounts of manganese dust and fume. In some studies, manganese has been associated with longer reaction times, hand steadiness and eye-hand coordination. Effects appear to be more pronounced with exposures to respirable sized particles. These effects result in a STOT-RE Category 2 classification.

#### Nickel (elemental and nickel oxide)

Animal studies have shown lung changes and inflammation following inhalation exposure. Effects vary with the form of nickel used in the studies, animal species and route of administration. There have been case reports of occupational asthma, pulmonary fibrosis and pulmonary edema in workers, however, exposure data is lacking. The animal studies result in a STOT-RE Category 1 classification.

#### Silica, Respirable Crystalline

Prolonged and repeated exposure to respirable crystalline silica may cause silicosis. Respirable crystalline silica may also cause immune system effects and kidney effects.

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### Aspiration Hazard

Based on the physical form, the product is not expected to be an aspiration hazard.

## SECTION 12: ECOLOGICAL INFORMATION

### Toxicity

Ecotoxicity is expected to be minimal since the product as sold is a solid with low water solubility. Dust generated and/or collected from further processing of the casting may be toxic to the environment.

### Persistence and Degradation

Not applicable

### Bioaccumulation

Not applicable

### Mobility in Soil

Not applicable

### Environmental Fate

Not applicable



### SECTION 13: DISPOSAL INFORMATION

Recover or recycle castings or dispose of according to federal, state and local regulations. Dust collected from product processing operations may be classified as a hazardous waste. Dispose of such dust in accordance with federal, state and local regulations.

### SECTION 14: TRANSPORTATION INFORMATION

#### U.S. Department of Transportation (DOT)

Product is not regulated

#### International Maritime Dangerous Goods (IMDG)

Product is not regulated

#### Transport in bulk according to Annex II of MARPOL 73/78 (Marine Pollution) and the International Bulk Chemical (IBC) Code

Product is not regulated

#### International Civil Aviation Org. (ICAO) / International Air Transport Assoc. (IATA)

Product is not regulated

### SECTION 15: REGULATORY INFORMATION

**This product is an article as sold.** If this product is further processed, the regulatory status of the components listed in the composition section of this sheet may be altered. The following regulatory information may not be complete and should not be relied upon as the sole source of information regarding regulatory responsibilities.

#### Occupational Health and Safety Administration

**This product is an article as sold.** Dust or fumes generated by further processing of the product may produce airborne contaminants that are regulated by OSHA. These are listed in Section 8.

#### TSCA Chemical Inventories

This product is an article as defined by Toxic Substances Control Act (TSCA) regulations, and is exempt from TSCA Inventory listing requirements

#### Other Regulatory Information

Substance	CAS #	CERCLA RQ (lbs)	Section 313	NPRI Threshold Category	California Prop 65
Chromium	7440-47-3	5,000	313	1A	Carcinogen (hexavalent form only)
Copper	7440-50-8	5,000	313		
Iron	7439-89-6				
Manganese	7439-96-5		313	1A	
Nickel	7440-02-0	100	313	1A	Carcinogen
Silica, respirable crystalline	14808-60-7				Carcinogen

#### Notes

**CAS** = Chemical Abstract Service Registry Number, a 7-digit identifier.

**CERCLA RQ** = Comprehensive Environmental Response, Compensation & Liability Act of 1980, Reportable Quantity. If a value is listed then releases of particles,  $\leq 100 \mu\text{m}$  in size, to the environment may require reporting under CERCLA Sections 102–103 (40 CFR Part 302).

**NPRI** = National Pollutant Release Inventory Threshold Category, if 1A or 1B is listed, may be subject to reporting under the Canadian Environmental Protection Act, 1999.

**Prop 65** = Proposition 65, if listed in the table above: See Section 3.

**Section 313** = if '313' is listed, may be subject to the reporting requirements found under Emergency Planning and Community Right-to-Know Act (EPCRA) Section 313 (40 CFR Part 372).

These products are not believed to contain any substances that meet the notification requirements found under EPCRA Sections 302 or 304 (40 CFR Part 355) nor subject to the accidental release prevention requirements under CAA 112(r) (40 CFR Part 68).

## SECTION 16: OTHER INFORMATION

**DATE PREPARED:** March 2018  
**DATE REVIEWED:** October 2024


**PREPARER:** TRC Environmental Corporation

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This SDS is intended to be used as a guide to the appropriate handling, storage, and use of this product by an adequately trained person. Waupaca Foundry, Inc. and TRC are not responsible for the misuse, mishandling or improper storage of this material by the user.

Waupaca Foundry, Inc. neither makes, nor offers nor shall be held liable for any express or implied warranties, including any warranties of merchantability and fitness for a particular purpose with respect to the use of the information provided.

Addendum: Label Information

<p><b><u>Product Identifier</u></b></p> <p>DUCTILE IRON and COMPACTED GRAPHITE IRON (CGI) CASTINGS</p>	
<p><b><u>Supplier Identification</u></b></p> <p>Company Name: <u>Waupaca Foundry, Inc.</u>                  Street Address: <u>1955 Brunner Drive</u>                  Mailing Address: <u>P.O. Box 249</u>                  City: <u>Waupaca</u> State: <u>WI</u>                  Zip/Postal Code: <u>54981</u> Country: <u>USA</u>                  Emergency Phone Number: <u>715-258-6611</u>                  Other Information: <u>www.waupacafoundry.com</u></p>	<p><b><u>Hazard Pictograms</u></b></p> <p>None*</p> <hr/> <p><b><u>Hazard Statements</u></b></p> <p>None*</p>
<p><b><u>Signal Word</u></b></p> <p>None*</p>	<p><b><u>Precautionary Statements</u></b></p> <p>None*</p>
<p><b>Castings in final form, not machined or further processed by customers are considered articles and therefore do not pose a physical hazard or health risk to employees.</b></p> <p>Dust or fumes released during machining, grinding, drilling, melting, casting, sawing, blasting, polishing, buffing, brazing, soldering, welding or thermal cutting of the product may produce airborne contaminants that are hazardous. See Safety Data Sheet for classification information for the hazardous substances that could be released or generated from such processes.</p> <p> <b>WARNING:</b> This product can expose you to chemicals including nickel, which is known to the State of California to cause cancer.</p>	

Addendum: Label Information

**Product Identifier**

DUCTILE IRON and COMPACTED GRAPHITE IRON (CGI) CASTINGS

**Supplier Identification**

Company Name: Waupaca Foundry, Inc.  
Street Address: 1955 Brunner Drive  
Mailing Address: P.O. Box 249  
City: Waupaca State: WI  
Zip/Postal Code: 54981 Country: USA  
Emergency Phone Number: 715-258-6611  
Other Information: www.waupacafoundry.com

**Hazard Pictograms**



**Hazard Statements**

No adverse health effects expected if the product is handled in accordance with this product label and the Safety Data Sheet. Symptoms or effects that may arise if the product is mishandled and overexposure occurs include:

May cause skin and eye irritation.  
May cause an allergic skin reaction  
May cause cancer through prolonged or repeated exposure via inhalation of fumes or respirable dust.  
Causes damage to respiratory system through prolonged or repeated exposure  
May cause damage to brain & nervous system through prolonged or repeated exposure

**Signal Word**

**DANGER**

**Precautionary Statements**

Obtain, read and follow all safety instructions before use.  
Do not breathe dust or fumes.  
In case of inadequate ventilation wear respiratory protection.  
Do not eat, drink or smoke when using this product.  
Use only outdoors or in a well-ventilated area.  
Wear protective work gloves, protective clothing, eye and face protection.  
Wash hands thoroughly after handling.  
Contaminated work clothing should not be allowed out of the workplace.  
Do not touch eyes.

IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get emergency medical help. Take off contaminated clothing and wash before reuse.  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical help.  
IF INHALED: Remove person to fresh air and keep comfortable for breathing. If exposed or concerned: Get emergency help immediately.

Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

**The classifications and information contained in this Label are for castings further machined or processed by customers and therefore pose a potential physical hazard or health risk to employees.** Dust or fumes released during machining, grinding, drilling, melting, casting, sawing, blasting, polishing, buffing, brazing, soldering, welding or thermal cutting of the product may produce airborne contaminants that are hazardous. Dust and/or fumes released during processing may contain hexavalent chromium, magnesium, manganese, molybdenum, nickel and respirable crystalline silica. The following classification information is for the hazardous substances that could be released or generated from such processes.



**WARNING:** This product can expose you to chemicals including nickel, silicon dioxide and hexavalent chromium, which are known to the State of California to cause cancer.