



# SAFETY DATA SHEET

in accordance with 29 CFR 1910.1200 and ANSI standard Z400.1-2010

## CAST STAINLESS STEEL SHOT

Revision date: 7/3/2015  
Version: 5 Language: en-  
US Date of print:  
4/29/2016

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### 1. Product and company identification

#### Product identifier

Trade name: CHRONITAL

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

General use: As a blasting agent.  
For industrial purposes only

#### Emergency Contact:

Telephone: 800-283-7468 Email: [info@abrasivematerials.com](mailto:info@abrasivematerials.com)  
Only available during office hours.

### 2. Hazards identification

#### Emergency overview

Appearance: Form: solid, powder  
Color: metallic silver  
Odor: gray odorless  
Classification: Sensitization - skin - Category 1; Carcinogenicity - Category 2;  
Specific Target Organ Toxicity (Repeated Exposure) - Category 2;

Hazard symbols:



Signal word:

**Warning**

Hazard statements:

May cause an allergic skin reaction.  
Suspected of causing cancer.  
May cause damage to organs through prolonged or repeated exposure.

Precautionary statements:

Obtain special instructions before use. Avoid breathing dust/fume/mist.  
Wear protective gloves/protective clothing/eye protection.  
IF ON SKIN: Wash with plenty of water/soap.  
IF exposed or concerned: Get medical advice/attention. Store locked up.

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### Regulatory status

This material is considered hazardous by the U.S. OSHA Hazard Communication Standard (29 CFR 1910.1200) and SIMDUT in Canada.

### Hazards not otherwise classified

The substance should only be handled in closed apparatus or systems. Vapors / Dust should be exhausted directly at the point of origin. Particular danger of slipping on spilled product on the ground.

see section 11: Toxicological information

## 3. Composition / Information on ingredients

Hazardous ingredients:

CAS No.	Designation	Content	Classification
CAS 7439-89-6	Iron	65 - 75 %	not applicable
CAS 7440-47-3	Chromium	< 20 %	not applicable
CAS 7440-02-0	Nickel	< 10 %	Sensitization - skin - Category 1. Carcinogenicity - Category 2. Specific Target Organ Toxicity (Repeated Exposure) - Category 1.
CAS 7439-96-5	Manganese	< 3 %	not applicable
CAS 7440-21-3	Silicon	< 3 %	not applicable
CAS 7440-44-0	Carbon	< 0.2 %	not applicable

## 4. First aid measures

In case of inhalation: Remove the casualty into fresh air and keep him calm.

Seek medical treatment in case of troubles.

Following skin contact: Immediately clean with water and soap followed by thorough rinsing.

In case of skin irritation, consult a physician.

After eye contact: Immediately flush eyes with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Consult an ophthalmologist.

After swallowing: Rinse mouth with water. Consult physician.

Never give anything by mouth to an unconscious person.

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

Sensitising. May cause damage to organs through prolonged or repeated exposure.

### Information to physician

Treat symptomatically.

## 5. Fire fighting measures

Flash point/flash point range:

no data available

Auto-ignition temperature: not self-igniting

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Suitable extinguishing media:

Sand, Special extinguishing powder for metals

Extinguishing media which must not be used for safety reasons:

Water

### Specific hazards arising from the chemical

Can be released in case of fire: Toxic metal oxide smoke

Protective equipment and precautions for firefighters:

Wear a self-contained breathing apparatus and chemical protective clothing.

Additional information:

Do not allow water used to extinguish fire to enter drains, ground or waterways.

Treat runoff as hazardous.

You have to dispose of contaminated extinguishing water according to the regulations of the authorities.

## 6. Accidental release measures

Personal precautions:

Avoid exposure. Provide adequate ventilation. Avoid generation of dust. Do not breathe dust. Wear protective equipment. Avoid contact with skin and eyes.

Environmental precautions:

Discharge into the environment must be avoided.

Methods for clean-up:

Take up mechanically. Dispose of in accordance with the regulations or material recycling. Do not use air pressure.

Additional information:

Particular danger of slipping on spilled product on the ground.

## 7. Handling and storage

### Handling

Advices on safe handling:

Avoid exposure - obtain special instructions before use.  
The substance should only be handled in closed apparatus or systems. Provide adequate ventilation, and local exhaust as needed.  
Vapors / Dust should be exhausted directly at the point of origin. Do not breathe dust. Wear protective equipment.  
Avoid contact with skin and eyes.

### Storage

Requirements for storerooms and containers:

Keep container dry.

Hints on joint storage:

Maintain air gap between stacks/pallets.  
Keep away from food, drink and animal feedingstuffs.  
Do not store together with acids.

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### 8. Exposure controls / personal protection

#### Exposure guidelines

Occupational exposure limit values:

CAS No.	Designation	Type	Limit value
7439-89-6	Iron	USA: ACGIH: TWA	10 mg/m <sup>3</sup> smoke, dust
		USA: OSHA: TWA	10 mg/m <sup>3</sup> smoke
7440-47-3	Chromium	USA: ACGIH: TWA	0.5 mg/m <sup>3</sup>
		USA: NIOSH: TWA	0.5 mg/m <sup>3</sup>
		USA: OSHA: TWA	0.5 mg/m <sup>3</sup>
7440-02-0	Nickel	USA: ACGIH: TWA	0.1 mg/m <sup>3</sup>
			(compounds, soluble; inhalable fraction)
		USA: ACGIH: TWA	0.2 mg/m <sup>3</sup>
			(compounds, insoluble; inhalable fraction)
		USA: ACGIH: TWA	1.5 mg/m <sup>3</sup> (metal, inhalable fraction)
		USA: NIOSH: TWA	0.015 mg/m <sup>3</sup>
7439-96-5	Manganese	OSHA: Ceiling	5 mg/m <sup>3</sup>
		USA: ACGIH: TWA	0.02 mg/m <sup>3</sup> respirable fraction
		USA: ACGIH: TWA	0.1 mg/m <sup>3</sup> inhalable fraction
		USA: NIOSH: STEL	3 mg/m <sup>3</sup>
		USA: NIOSH: TWA	1 mg/m <sup>3</sup>
7440-21-3	Silicon	USA: NIOSH: TWA	10 mg/m <sup>3</sup> inhalable fraction
		USA: NIOSH: TWA	5 mg/m <sup>3</sup> (respirable fraction)
		USA: OSHA: TWA	15 mg/m <sup>3</sup> inhalable fraction
		USA: OSHA: TWA	5 mg/m <sup>3</sup> (respirable fraction)
7440-44-0	Carbon	USA: OSHA: TWA	15 mg/m <sup>3</sup> inhalable fraction
		USA: OSHA: TWA	5 mg/m <sup>3</sup> (respirable fraction)

Additional information: Limiting values are only defined for the above-mentioned material, whereas no such limits have been established for alloys made out of it.

#### Engineering controls

The substance should only be handled in closed apparatus or systems.

Provide adequate ventilation, and local exhaust as needed.

Vapors / Dust should be exhausted directly at the point of origin.

See also information in chapter 7, section storage.

#### Personal protection equipment (PPE)

Eye/face protection: Tightly sealed goggles according to OSHA Standard - 29 CFR: 1910.133 or ANSI Z87.1-2010.

Skin protection: Wear suitable protective clothing.

protective gloves according to OSHA Standard - 29 CFR:

1910.138. Glove material: Nitrile rubber.

Observe glove manufacturer's instructions concerning penetrability and breakthrough time.

Respiratory protection: Respiratory protection must be worn whenever the TLV (WEL) levels have been exceeded.

Use filter type FFP2 according to OSHA Standard - 29 CFR: 1910.134 or ANSI Z88.2.



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#### General hygiene considerations:

Obtain special instructions before use.  
When using do not eat, drink or smoke.  
Do not breathe dust. Avoid contact with the substance.  
Wash hands before breaks and after work.  
Eye wash facility must be provided.

## 9. Physical and chemical properties

### Information on basic physical and chemical properties

Appearance:	Form: solid, powder Color: metallic silver gray
Odor:	odorless
Odor threshold:	no data available
pH value:	no data available
Melting point/freezing point:	2552 - 2822 °F
Initial boiling point and boiling range:	no data available
Flash point/flash point range:	no data available
Evaporation rate:	no data available
Flammability:	no data available
Explosion limits:	no data available
Vapor pressure:	no data available
Vapor density:	no data available
Density:	at 68 °F: 7.7 - 8.1 g/cm <sup>3</sup>
Water solubility:	insoluble
Partition coefficient: n-octanol/water:	no data available
Auto-ignition temperature:	not self-igniting
Thermal decomposition:	no data available
Bulk density:	approx. 4700 kg/m <sup>3</sup>

## 10. Stability and reactivity

Reactivity:	With exposure to acids, product will release hydrogen.
Chemical stability:	Product is stable under normal storage conditions.
Possibility of hazardous reactions	No hazardous reactions known.
Conditions to avoid:	no data available
Incompatible materials:	acids
Hazardous decomposition products:	Can be released in case of fire: Toxic metal oxide smoke
Thermal decomposition:	no data available

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## 11. Toxicological information

### Toxicological tests

Toxicological effects:

Acute toxicity (oral): Lack of data.  
Acute toxicity (dermal): Lack of data.  
Acute toxicity (inhalative): Lack of data.  
Skin corrosion/irritation: Lack of data.  
Eye damage/irritation: Lack of data.  
Sensitisation to the respiratory tract: Lack of data.  
Skin sensitisation: Sensitization - skin - Category 1 = May cause an allergic skin reaction.  
Germ cell mutagenicity/Genotoxicity: Lack of data.  
Carcinogenicity: Carcinogenicity - Category 2 = Suspected of causing cancer.  
Reproductive toxicity: Lack of data.  
Effects on or via lactation: Lack of data.  
Specific target organ toxicity (single exposure): Lack of data.  
Specific target organ toxicity (repeated exposure): Specific Target Organ Toxicity (Repeated Exposure) -  
Category 2 = May cause damage to organs through prolonged or repeated exposure.  
Aspiration hazard: Lack of data.

Carcinogenic, germ cell mutagen and reproduction effects:

Carc. Cat. 3 - Limited evidence of a carcinogenic effect.

### General remarks

Information about Nickel:  
LD50 Rat, oral: 9000 mg/kg; LDLo Rat, oral: 500 mg/kg. Limited evidence of a carcinogenic effect.  
May cause sensitisation by skin contact.  
Toxic: danger of serious damage to health by prolonged exposure through inhalation.

## 12. Ecological information

### Ecotoxicity

Further details: no data available

### Mobility in soil

no data available

### Persistence and degradability

Further details: Methods for the determination of biodegradability are not applicable to inorganic substances.

### Additional ecological information

General information: Discharge into the environment must be avoided.

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#### 13. Disposal considerations

##### Product

Recommendation: Material recycling.

##### Contaminated packaging

Recommendation: Non-contaminated packages may be recycled.  
Dispose of waste according to applicable legislation.

#### 14. Transport information

##### USA: Department of Transportation (DOT)

Proper shipping name: Not controlled under DOT

##### Sea transport (IMDG)

Proper shipping name: Not  
Marine pollutant: restricted No

##### Air transport (IATA)

Proper shipping name: Not restricted

##### Further information

No dangerous good in sense of these transport regulations.

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### 15. Regulatory information

#### U.S. Federal Regulations

Iron: TSCA Inventory: listed  
TSCA HPVC: not listed

Chromium: TSCA Inventory: listed  
TSCA HPVC: not listed  
Carcinogen Status:  
IARC Rating: Group 3  
OSHA Carcinogen: not listed  
NTP Rating: not listed  
Clean Water Act:  
Priority Pollutant: yes  
Other Environmental Laws:  
CERCLA: RQ 5000 lbs.  
RCRA Hazardous Wastes: Code D007  
RCRA Groundwater Monitoring: Methods 6010, 7190, 719 / PQL 70, 500, 10  
SARA Title III Section 313, Toxic Release: Conc. 0.1% / Threshold Standard  
NIOSH Recommendations:  
Occupational Health Guideline: 0141

Nickel: TSCA Inventory: listed  
TSCA HPVC: not listed  
Carcinogen Status:  
IARC Rating: Group 2B  
OSHA Carcinogen: not listed  
NTP Rating: listed  
Clean Water Act:  
Priority Pollutant: yes  
Other Environmental Laws:  
CERCLA: RQ 100\* lbs.  
RCRA Groundwater Monitoring: Methods 6010, 7520 / PQL 50, 400  
SARA Title III Section 313, Toxic Release: Conc. 0.1% / Threshold Standard  
NIOSH Recommendations:  
Occupational Health Guideline: 0445\*

Manganese: TSCA Inventory: listed  
TSCA HPVC: not listed  
Other Environmental Laws:  
SARA Title III Section 313, Toxic Release: Conc. 1.0% / Threshold Standard  
NIOSH Recommendations:  
Occupational Health Guideline: 0379\*

Carbon: TSCA Inventory: listed  
TSCA HPVC: not listed  
NIOSH Recommendations:  
Occupational Health Guideline: 0307

#### National regulations - Great Britain

Hazchem-Code: -

### 16. Other information

Text for labeling: Contains 65 - 75 % Iron, < 20 % Chromium, < 10 % Nickel, < 3 % Manganese, < 3 % Silicon, < 0.2 % Carbon. Safety data sheet available on request.



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Hazard rating systems:



NFPA Hazard Rating:

Health: 2 (Moderate)

Fire: 1 (Slight)

Reactivity: 0 (Minimal)

HMIS Version III Rating:

Health: 2 (Moderate) - Chronic

effects Flammability: 1 (Slight)

Physical Hazard: 0 (Minimal)

Personal Protection: X = Consult your supervisor

Reason of change:

General revision (Regulation (EU) No

Date of first version:

2015/830) 5/26/2009

HEALTH	*	2
FLAMMABILITY		1
PHYSICAL HAZARD		0
		X

### Department issuing data sheet

Contact person:

see section 1: Dept. responsible for information

The information in this data sheet has been established to our best knowledge and was up-to-date at time of revision. It does not represent a guarantee for the properties of the product described in terms of the legal warranty regulations.