



# SAFETY DATA SHEET

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

## GRITTAL

Material number 0402

Revision date: 7/3/2015

Version: 4 Language: en-

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## 1. Product and company identification

### Product identifier

Trade name: GRITTAL

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

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

### Details of the supplier of the safety data sheet

Company name: Vulkan Blast Shot  
Street/POB-No.: 2-10 Plant Farm Blvd.  
Postal Code, city: Brantford, Ontario  
Country: Canada  
Web address: www.vulkanshot.com  
Telephone: 800-263-7674  
Telefax: 519-759-8472

### Emergency Contact:

Telephone: 800-263-7674 Email: vulkan@vulkanshot.com  
Only available during office hours.

## 2. Hazards identification

### Emergency overview

Appearance: Form: solid, powder  
Color: metallic silver  
Odor: gray odorless  
Classification: This material is classified as not hazardous.

Precautionary statements:  
Do not breathe dust.

### Regulatory status

While this material is not considered hazardous by the U.S. OSHA Hazard Communication Standard (29 CFR 1910.1200) and SIMDUT in Canada, this MSDS contains valuable information critical to the safe handling and proper use of the product.

### Hazards not otherwise classified

For machine processing: Dusts, vapors. Harmful by inhalation.  
see section 11: Toxicological information

## 3. Composition / Information on ingredients

Chemical characterization: Chromium-alloy



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Hazardous ingredients:

CAS No.	Designation	Content	Classification
CAS 7439-89-6	Iron	$\geq 50 \%$	not applicable
CAS 7440-47-3	Chromium	$< 35 \%$	not applicable
CAS 7440-44-0	Carbon	$< 5 \%$	not applicable
CAS 7439-96-5	Manganese	$< 3 \%$	not applicable
CAS 7440-21-3	Silicon	$< 3 \%$	not applicable

### 4. First aid measures

In case of inhalation: Move victim to fresh air. Seek medical treatment in case of troubles.

Following skin contact: Thoroughly wash skin with soap and water. In case of skin reactions, 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 immediately and drink plenty of water. Consult physician. Never give anything by mouth to an unconscious person.

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

Dusts, vapors: irritant.

#### Information to physician

Treat symptomatically.

### 5. Fire fighting measures

Flash point/flash point range: no data available

Auto-ignition temperature: not self-igniting

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 self-contained breathing apparatus.

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



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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.

## 7. Handling and storage

### Handling

Advices on safe handling:

The substance should only be handled in closed apparatus or systems. Provide adequate ventilation, and local exhaust as needed. Do not breathe dust. Wear protective equipment.

### Storage

Requirements for storerooms and containers:

Keep container dry.

Hints on joint storage:

Keep away from food, drink and animal feedingstuffs. Do not store together with acids.

## 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>
7440-44-0	Carbon	USA: OSHA: TWA	15 mg/m <sup>3</sup> inhalable fraction
		USA: OSHA: TWA	5 mg/m <sup>3</sup> (respirable fraction)
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)

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.

See also information in chapter 7, section storage.



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### 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-Breakthrough time: > 480 min.  
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.
- General hygiene considerations:  
When using do not eat, drink or smoke.  
Do not breathe dust. Do not breathe vapors. Avoid contact with skin and eyes.  
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
- Additional information: no data available

## 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.



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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

## 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: Lack of data.

Germ cell mutagenicity/Genotoxicity: Lack of data.

Carcinogenicity: Lack of data.

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): Lack of data.

Aspiration hazard: Lack of data.

### Symptoms

In case of inhalation: For machine processing: Dusts, vapors. Harmful by inhalation.

After eye contact: Dusts, vapors (For machine processing): irritant

## 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

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

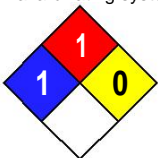
Manganese: TSCA Inventory: listed  
TSCA HPVC: not listed  
Other Environmental Laws:  
SARA Title III Section 313, Toxic Release: Conc. 1.0% / Threshold Standard  
NIOSH Recommendations:  
Occupational Health Guideline: 0379\*

#### National regulations - Great Britain

Hazchem-Code: -

### 16. Other information

Hazard rating systems:



NFPA Hazard Rating:  
Health: 1 (Slight)  
Fire: 1 (Slight)  
Reactivity: 0 (Minimal)

HMIS Version III Rating:  
Health: 1 (Slight)  
Flammability: 1 (Slight)  
Physical Hazard: 0 (Minimal)  
Personal Protection: X = Consult your supervisor

Reason of change: General revision (Regulation (EU) No 2015/830)

Date of first version: 5/26/2009

#### Department issuing data sheet

Contact person: see section 1: Dept. responsible for information

HEALTH	1
FLAMMABILITY	1
PHYSICAL HAZARD	0
	X



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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.