



SAFETY DATA SHEET

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

Revision date: 11/23/2018
Version: 4 Language: en

GRITTAL

Material number 0402

Page: 1 of 8

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



SAFETY DATA SHEET

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

Revision date: 11/23/2018
Version: 4 Language: en

GRITTAL

Material number 0402

Page: 2 of 8

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.



SAFETY DATA SHEET

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

Revision date: 11/23/2018
Version: 4 Language: en

GRITTAL

Material number 0402

Page: 3 of 8

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 ³ smoke, dust
		USA: OSHA: TWA	10 mg/m ³ smoke
7440-47-3	Chromium	USA: ACGIH: TWA	0.5 mg/m ³
		USA: NIOSH: TWA	0.5 mg/m ³
		USA: OSHA: TWA	0.5 mg/m ³
7440-44-0	Carbon	USA: OSHA: TWA	15 mg/m ³ inhalable fraction
		USA: OSHA: TWA	5 mg/m ³ (respirable fraction)
7439-96-5	Manganese	OSHA: Ceiling	5 mg/m ³
		USA: ACGIH: TWA	0.02 mg/m ³ respirable fraction
		USA: ACGIH: TWA	0.1 mg/m ³ inhalable fraction
		USA: NIOSH: STEL	3 mg/m ³
		USA: NIOSH: TWA	1 mg/m ³
7440-21-3	Silicon	USA: NIOSH: TWA	10 mg/m ³ inhalable fraction
		USA: NIOSH: TWA	5 mg/m ³ (respirable fraction)
		USA: OSHA: TWA	15 mg/m ³ inhalable fraction
		USA: OSHA: TWA	5 mg/m ³ (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.



SAFETY DATA SHEET

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

Revision date: 11/23/2018
Version: 4 Language: en

GRITTAL

Material number 0402

Page: 4 of 8

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/cm³
- 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.



SAFETY DATA SHEET

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

GRITTAL

Material number 0402

Revision date: 11/23/2018
Version: 4 Language: en

Page: 5 of 8

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.



SAFETY DATA SHEET

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Revision date: 11/23/2018
Version: 4 Language: en

GRITTAL

Material number 0402

Page: 6 of 8

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.



SAFETY DATA SHEET

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

Revision date: 11/23/2018
Version: 4 Language: en

GRITTAL

Material number 0402

Page: 7 of 8

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

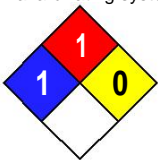
Manganese: TSCA Inventory: listed
TSCA HPVC: not listed
Other Environmental Laws:
SARA Title III Section 313, Toxic Release: Conc. 1.0% / Threshold Standard
NIOSH Recommendations:
Occupational Health Guideline: 0379*

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

HEALTH	1
FLAMMABILITY	1
PHYSICAL HAZARD	0
	X

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



SAFETY DATA SHEET

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GRITTAL

Material number 0402

Revision date: 11/23/2018
Version: 4 Language: en

Page: 8 of 8

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.