



VULKAN BLAST SHOT TECHNOLOGY

10 Plant Farm Blvd., Unit 2
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Material Safety Data Sheet GRITTAL

Revision Date: February 1, 2008

1 Material / Preparation and Company Name

- 1.1 **Specifications of the material / preparation**
- 1.1.1 **Type of Product**
Chromium casting alloy
- 1.1.2 **Product name**
GRITTAL, rust-resistant, cast chromium casting abrasives
- 1.1.3 **Trade name**
GRITTAL
- 1.2 **Specifications of the manufacturer / importer / supplier**
- 1.2.1 **manufacturer / importer / supplier**
Vulkan Blast Shot Technology
- 1.2.2 **Company address**
10 Plant Farm Blvd., Unit 2, Brantford, Ontario Canada N3S 7W3
- 1.2.3. **Place of business / postal address / country code / ZIP code / city**
10 Plant Farm Blvd., Unit 2
Brantford, Ontario Canada N3S 7W3
- 1.2.4 **Telephone**
519-753-2226 or 1-800-263-7674 (U.S. and Canada)
- 1.2.5 **Facsimile**
519-759-8472
- 1.2.6 **For further information, pls. contact**
Quality Assurance Department
- 1.2.7 **Emergency number**
519-753-2226

2 Composition / Indication of Ingredients

- 2.1 **Chemical characterisation of the preparation**
Iron-chromium-carbon alloy
Main components:
 - Cr: 30 % (metallic Chrome)
 - Cr⁶⁺: 0,00 % (Chrome (VI), Hexavalent Chrome)
 - Si: < 2 %
 - Mn: < 2 %
 - C: < 3 %
 - Mo: < 4 %

2.2 Hazardous ingredients

This product does not contain any components in concentrations which require a classification as a hazardous substance in accordance with the CE directive.

Carcinogenicity: Not classifiable as to its carcinogenicity to humans

3 Possible Hazards

Designation of hazards	During mechanical application (i.e in blasting plants) dust and vapour may occur. The usual precautions should be taken. The statutory limit values for dust and vapour have to be adhered to.
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4 First - Aid Measures

4.1 General Notes	First - aid measures only refer to dust.
4.1.1 Measures in case of inhaling	Ensure sufficient fresh air supply, and consult a physician, if necessary.
4.1.2 Measures in case of eye contact	Rinse your eyes with plenty of water; consult a physician, if necessary.

5 Fire - Fighting Measures

not applicable (n.a.)

6 Measures to be taken in case of unintended release

not applicable (n.a.)

7 Handling and storage

7.1 Handling	no hazard
7.2 Storage	no hazard

8 Restriction of exposure and personal protective equipment

8.1 Additional notes regarding the configuration of technical plants	see. Item 3.1
8.2 Components with workplace - specific limiting values to be controlled	Limiting values are only defined for pure Chromium and pure Manganese, whereas no such limits exist for steel alloys containing such elements.
8.3 Personal protective equipment	Standard equipment for processing of metals. Dust and vapour have to be maintained below the statutory limits by providing adequate suction facilities.

9 Physical and chemical properties

9.1 Appearance	
9.1.1 State	solid
9.1.2 Colour	dark grey, metallic
9.1.3 Odour	odourless

9.2	Safety-relevant data	n.a.
9.2.1	pH - value	n.a.
9.2.2	Change of state	
9.2.2.1	Boiling point	n.a.
9.2.2.2	Melting point	1.400 - 1.550 °C (depending on the alloy)
9.2.3	Flash point	n.a.
9.2.4	Inflammability	n.a.
9.2.5	Ignition temperature	n.a.
9.2.6	Self-inflammability	n.a.
9.2.7	Fire promoting properties	n.a.
9.2.8	Explosion limits	n.a.
9.2.9	Vapour pressure at... °C	n.a.
9.2.10	Density at 20°C	481 - 506 lbs/ft ³
9.2.11	Solubilizing properties and distribution	
9.2.11.1	Water-Solubility	insoluble
9.2.11.2	Fat-Solubility	n.a.
9.2.11.3	Distribution coefficient	n.a.

10	Stability and Reactivity
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stable and non-reactive

11	Indications concerning toxicology
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The abrasive bearing the product name GRITTAL has been examined by the BIA (institute of occupational safety affiliated to the German employers' liability insurance association) with regard to the content of silicogenic, toxic and carcinogenic components, and approved as a non-silicogenic material.

12	Notes regarding ecology
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not water-soluble, no precautions required.

13	Notes regarding utilization and disposal
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Waste and scrap constitute valuable materials, which can easily be disposed, since new products of high value can be produced by means of recycling.

14	Notes regarding transport
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not classified as hazardous material in the sense of transport regulations.

15	Regulations
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|---------------|---|
| 15.1 | identification according to Ri67/548/EWG |
| 15.1.1 | Code and hazard designation of the product
n.a. |
| 15.1.2 | R - clauses
n.a. |
| 15.1.3 | S - clauses
n.a. |

16 Other Indications

16.1 References

- 1) **Abrasives test certificate no. 2002/21840/9311 of 05/23/2002 issued by the institute of occupational safety affiliated to the German employers' liability insurance association.**

Declaration: The indications made in this Safety Data Sheet are based on the present state of our know-how and experience. The Safety Data Sheet describes the products in view of safety requirements. The indications do not constitute any guarantee with regard to product properties and do not create a contractual legal relationship.