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 stainless steel 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)
Cr\textsuperscript{VI}: 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. |

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

<table>
<thead>
<tr>
<th>Subsection</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>9.2.1 pH - value</td>
<td>n.a.</td>
</tr>
<tr>
<td>9.2.2 Change of state</td>
<td>n.a.</td>
</tr>
<tr>
<td>9.2.2.1 Boiling point</td>
<td>n.a.</td>
</tr>
<tr>
<td>9.2.2.2 Melting point</td>
<td>1.400 - 1.550 °C</td>
</tr>
<tr>
<td></td>
<td>(depending on the alloy)</td>
</tr>
<tr>
<td>9.2.3 Flash point</td>
<td>n.a.</td>
</tr>
<tr>
<td>9.2.4 Inflammability</td>
<td>n.a.</td>
</tr>
<tr>
<td>9.2.5 Ignition temperature</td>
<td>n.a.</td>
</tr>
<tr>
<td>9.2.6 Self-inflammability</td>
<td>n.a.</td>
</tr>
<tr>
<td>9.2.7 Fire promoting properties</td>
<td>n.a.</td>
</tr>
<tr>
<td>9.2.8 Explosion limits</td>
<td>n.a.</td>
</tr>
<tr>
<td>9.2.9 Vapour pressure at.... °C</td>
<td>n.a.</td>
</tr>
<tr>
<td>9.2.10 Density at 20°C</td>
<td>481 - 506 lbs/ft³</td>
</tr>
<tr>
<td>9.2.11 Solubilizing properties and distribution</td>
<td></td>
</tr>
<tr>
<td>9.2.11.1 Water-Solubility</td>
<td>insoluble</td>
</tr>
<tr>
<td>9.2.11.2 Fat-Solubility</td>
<td>n.a.</td>
</tr>
<tr>
<td>9.2.11.3 Distribution coefficient</td>
<td>n.a.</td>
</tr>
</tbody>
</table>

### 10 Stability and Reactivity

stable and non-reactive

### 11 Indications concerning toxicology

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

not water-soluble, no precautions required.

### 13 Notes regarding utilization and disposal

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

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

### 15 Regulations

<table>
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<tr>
<td>15.1 identification according to Ri67/548/EWG</td>
<td>n.a.</td>
</tr>
<tr>
<td>15.1.1 Code and hazard designation of the product</td>
<td>n.a.</td>
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<tr>
<td>15.1.2 R - clauses</td>
<td>n.a.</td>
</tr>
<tr>
<td>15.1.3 S - clauses</td>
<td>n.a.</td>
</tr>
</tbody>
</table>
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.