

|  |   |              |                                    |   |         |                                    |     |   |         |   |                                |   |       |   |     |   |        |   |     |   |       |   |   |   |           |   |       |   |             |  |
|--|---|--------------|------------------------------------|---|---------|------------------------------------|-----|---|---------|---|--------------------------------|---|-------|---|-----|---|--------|---|-----|---|-------|---|---|---|-----------|---|-------|---|-------------|--|
| <b>Description</b>                               | During melting of copper ore concentrates an iron silicate is formed. This is passing a groove and is granulated at a temperature of approximately 1250 °C, using a temperature-controlled pressurized water jet. After cooling down in a tank with fresh water the fine particles are separated from the granulate manufactured in this way. Material produced in accordance with DIN EN ISO 11126-3   |              |                                    |   |         |                                    |     |   |         |   |                                |   |       |   |     |   |        |   |     |   |       |   |   |   |           |   |       |   |             |  |
| <b>Applications</b>                              | Used as blast cleaning abrasive for all applications fields in conventional corrosion protection on almost all surfaces. Suitable for SA-3, SA-2½, SA-2 and SA-1.   |              |                                    |   |         |                                    |     |   |         |   |                                |   |       |   |     |   |        |   |     |   |       |   |   |   |           |   |       |   |             |  |
| <b>Properties</b>                                | <p>Vitreous amorphous slag. Absorbs no water. During the manufacture of the abrasive no crushing or grinding procedures are included. Therefore, the single abrasive particle is not broken up and retains its extreme hardness and tenacity which is the case for all particle sizes. Dust reduced. All constituents are present in oxidized form, predominantly as bonded silicate.</p> <p>Shape : angular<br/>                 Color : grey / black – vitreous amorphous slag<br/>                 Hardness : &gt;7 Mohs<br/>                 Specific density : 3.7 kg/dm<sup>3</sup><br/>                 Loose bulk density : 1.85 kg/dm<sup>3</sup><br/>                 Conductivity : less than 20 mS/m<br/>                 Water-soluble chlorides : less than 0,0025% (m/m)</p> |              |                                    |   |         |                                    |     |   |         |   |                                |   |       |   |     |   |        |   |     |   |       |   |   |   |           |   |       |   |             |  |
| <b>Chemical Composition</b><br>(indication only) | <table border="0"> <tr> <td>SiO<sub>2</sub></td> <td>:</td> <td>33 - 38</td> <td>% in bound form, &lt;0,1% free silica</td> </tr> <tr> <td>FeO</td> <td>:</td> <td>51 - 58</td> <td>%</td> </tr> <tr> <td>Al<sub>2</sub>O<sub>3</sub></td> <td>:</td> <td>4 - 8</td> <td>%</td> </tr> <tr> <td>CaO</td> <td>:</td> <td>2 - 10</td> <td>%</td> </tr> <tr> <td>MgO</td> <td>:</td> <td>1 - 3</td> <td>%</td> </tr> <tr> <td>S</td> <td>:</td> <td>0,6 - 1,3</td> <td>%</td> </tr> <tr> <td>Other</td> <td>:</td> <td colspan="2">traces only</td> </tr> </table>  |              | SiO <sub>2</sub>                   | : | 33 - 38 | % in bound form, <0,1% free silica | FeO | : | 51 - 58 | % | Al <sub>2</sub> O <sub>3</sub> | : | 4 - 8 | % | CaO | : | 2 - 10 | % | MgO | : | 1 - 3 | % | S | : | 0,6 - 1,3 | % | Other | : | traces only |  |
| SiO <sub>2</sub>                                 | :   | 33 - 38      | % in bound form, <0,1% free silica |   |         |                                    |     |   |         |   |                                |   |       |   |     |   |        |   |     |   |       |   |   |   |           |   |       |   |             |  |
| FeO  | :   | 51 - 58      | %                                  |   |         |                                    |     |   |         |   |                                |   |       |   |     |   |        |   |     |   |       |   |   |   |           |   |       |   |             |  |
| Al <sub>2</sub> O <sub>3</sub>                   | :   | 4 - 8        | %                                  |   |         |                                    |     |   |         |   |                                |   |       |   |     |   |        |   |     |   |       |   |   |   |           |   |       |   |             |  |
| CaO  | :   | 2 - 10       | %                                  |   |         |                                    |     |   |         |   |                                |   |       |   |     |   |        |   |     |   |       |   |   |   |           |   |       |   |             |  |
| MgO  | :   | 1 - 3        | %                                  |   |         |                                    |     |   |         |   |                                |   |       |   |     |   |        |   |     |   |       |   |   |   |           |   |       |   |             |  |
| S  | :   | 0,6 - 1,3    | %                                  |   |         |                                    |     |   |         |   |                                |   |       |   |     |   |        |   |     |   |       |   |   |   |           |   |       |   |             |  |
| Other  | :   | traces only  |                                    |   |         |                                    |     |   |         |   |                                |   |       |   |     |   |        |   |     |   |       |   |   |   |           |   |       |   |             |  |
| <b>Grain sizes</b>                               | 0.2 - 1.0 mm  | 0.5 - 1.5 mm |                                    |   |         |                                    |     |   |         |   |                                |   |       |   |     |   |        |   |     |   |       |   |   |   |           |   |       |   |             |  |
|  | 0.2 - 1.4 mm  | 0.5 - 2.5 mm |                                    |   |         |                                    |     |   |         |   |                                |   |       |   |     |   |        |   |     |   |       |   |   |   |           |   |       |   |             |  |
|  | 0.2 - 2.0 mm  | 1.5 - 2.8 mm |                                    |   |         |                                    |     |   |         |   |                                |   |       |   |     |   |        |   |     |   |       |   |   |   |           |   |       |   |             |  |
|  | 0.2 - 2.8 mm  |              |                                    |   |         |                                    |     |   |         |   |                                |   |       |   |     |   |        |   |     |   |       |   |   |   |           |   |       |   |             |  |
| <b>Packing</b>                                   | <ul style="list-style-type: none"> <li>– Paper bags of 25 or 50 kg, on shrinkfoiled export pallets.</li> <li>– Strong woven polypropylene big bags, with 4 lifting loops.</li> <li>– Other packaging options on request</li> <li>–</li> </ul>   |              |                                    |   |         |                                    |     |   |         |   |                                |   |       |   |     |   |        |   |     |   |       |   |   |   |           |   |       |   |             |  |
| <b>ISO</b>                                       | Product standards ISO 11126-3 and 11127.  |              |                                    |   |         |                                    |     |   |         |   |                                |   |       |   |     |   |        |   |     |   |       |   |   |   |           |   |       |   |             |  |

Equipment, materials and abrasives used for surface preparation can be hazardous if used carelessly. Many national regulations exist for those materials and abrasives that are considered to be hazardous during or after use (waste management), such as free silica or carcinogenic or toxic substances. Those regulations are therefore to be observed. It is important to ensure that adequate instructions are given and that all required precautions are exercised.

TDS. 2014-1-NAstra® Iron Silicate (UK) 1/1

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