

MATERIAL SAFETY DATA SHEET

1/5

GARNET SAND

Revised date: 18-06-2008

| 1. Identification of material / preparation and firm | |
|---|--|
| 1.1 Description of preparation | Garnet sand |
| 1.2 Use of the preparation | Abrasive |
| 1.3 Detail of manufacturer / supplier | |
| Firm | Dragon Abrasives I&E Co., Ltd. |
| Address | Rm.537, West Keyan Road 2. |
| Postal code | 300192 |
| Phone | 0086-22-87899539 |
| Fax | 0086-22-87899537 |

| 2. Composition / Information on ingredients | | | | |
|--|---|--|-------------|-------------|
| Chemical characterization of the preparation | | | | |
| Description | | Mixture of the substances listed below with Admixtures which are, pursuant to the Ordinance on Dangerous Substances (GefStoffV), not subject to labeling Requirements. | | |
| Contents (average values) | | Garnet sand | | |
| EC No. CAS No. | Description | % | Code letter | R-sentences |
| 231-716-3 7699-41-4 | Silicon Oxide (SiO ₂) | 35.00 | - | - |
| 215-168-1 1309-37-2 | Iron Oxide (FeO) | 30 | - | - |
| 215-168-2 1309-37-1 | Iron (III) Oxide (Fe ₂ O ₃) | 3.00 | - | - |
| 215-691-6 1344-28-1 | Aluminium oxide (Al ₂ O ₃) | 23.00 | - | - |
| 215-171-9 1309-48-4 | Magnesium oxide (MgO) | 6.00 | - | - |
| 215-138-9 1305-78-8 | Calcium oxide (CaO) | 1.00 | - | - |
| 215-266-5 1317-35-7 | Manganese oxide (MnO) | 1.00 | - | - |
| | Total Chlorides (Cl) | 10 ppm | - | - |
| | Lead (Zn) | 0.0015 | - | - |
| | Copper (Cu) | 0.003 | - | - |
| | Sulphur (S) | 0.006 | - | - |

| 3. Possible dangers | |
|--|--|
| Classification | Not subject to labeling requirements under the Dangerous Preparations Directive 1999/45/EC However, please note the information contained In this safety data sheet. Garnet sand is not injurious to the health. No. Danger of silicosis arises when using the product. Garnet sand is not carcinogenic and is Toxicologically harmless |
| Additional danger warnings for humans And environment | - |

| 4. First Aid measures | |
|--|---|
| General information | - |
| After inhalation | Take injured person into the fresh air and have Him/her lie calmly. |
| After contact with skin | Wash off with soap and water. |
| After contact with eyes | In case of contact with eyes, rinse open eyes Under flowing water for 10 minutes. |
| After swallowing | Rinse out mouth and drink lots of water, Do not Try and cause vomiting. If person feels unwell, Consult doctor. |
| Protection of person providing First Aid | Ensure the person provided First Aid is protected |
| Notes for the doctor | - |

| 5. Fire-fighting measures | |
|--|--|
| Suitable extinguishing substances | Product itself does not burn. Adapt extinguishing Measures to environment. |
| Extinguishing substances which are not Suitable due to safety reasons. | None known |
| Special dangers from the substance or the Preparation itself, its combustion products Or gases which arise | None known. |
| Special protective equipment in fighting fire | - |
| Additional information | - |

| 6. Accidental release measures | |
|--|--|
| Person-related precautionary measures | Avoid dust formation See protective measures under points 7 and 8 |
| Environmental protection measures | - |
| Procedures to clean up / take up product | Take up mechanically and dispose of properly. |
| Additional information | - |

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| 7 Handling and storage | |
| 7.1 Handling | |
| Information on dealing with product safely | Avoid dust formation. |
| Information on fire and explosion Protection. | No special fire protection measures necessary. |
| 7.2 Storage | Store in the dry, Material tends to agglomerate in Damp conditions. |
| Requirements of containers | - |
| Unsuitable material for Containers/equipment | - |
| Information on mixed storage | LGK 13 (non-flammable solid materials) |

8 Exposure limits and equipment for personal protection

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| 8.1 Exposure limit values/Occupational limit values | |
| General dust limit value | |
| Inhale amount (E) | 10 mg/m ³ |
| Alveolar amount (A) | 3 mg/m ³ |
| 8.2 Equipment for personal protection | |
| Respiratory protection | Normally, no personal respiratory protection is Necessary in the case of insufficient ventilation or exceeding occupational limit values, a breathing mask is to be worn (FFP filtering half-mask face piece, depending on the given Concentration) |
| Hand protection | Glove material: leather |
| Eye protection | Tight-fitting protective goggles. (closed safety Goggles) |
| Body protection | - |
| Protective and hygiene measures | Minimum standards regarding protective Measures for dealing with working substances Are listed in TRGS 500. do not eat, drink, smoke Or take snuff during work. Avoid contact with skin, eyes and clothes. Remove soiled or soaked clothes immediately, Wash hands before breaks and at the end of work. Precautionary protection of skin through skin Ointments. |

9 physical and chemical properties

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| 9.1 Appearance | |
| State of aggregation | Solid |
| Shape | Angular |
| color | Red-brown |
| Smell | Odourless |

| 9.2 Safety-relevant data | |
|--------------------------|--------------------------------------|
| pH value | n.m.a. (not meaningfully applicable) |
| Melting point | Approx. 1,315 C |
| Solidification point | n.m.a. (not meaningfully applicable) |
| Boiling point | n.m.a. (not meaningfully applicable) |
| Flash point | Substance is inorganic. |
| Autoignition | The product is not self-igniting. |
| Danger of explosion | The product is not explosive. |
| Relative density | Approx.2.0-2.1 g/cm ³ |
| Water solubility | Insoluble |

| 10 Stability and reactivity | |
|--------------------------------|--|
| Conditions to be avoided | - |
| Substances to be avoided | - |
| Dangerous decomposition points | No dangerous decomposition products known. |
| Other details | - |

| 11 Toxicological information | |
|--|-------------------------|
| Acute toxicity | - |
| Irritation of and caustic effect on the skin | Not irritating |
| Irritation of and caustic effect on eyes | Not irritating |
| Sensitization | No sensitization known. |
| General comments | - |

| 12 Ecological information | |
|--------------------------------|---|
| Ecotoxic effects | No damaging effect on water organisms is to be Expected. |
| Information on elimination | This product is, according to experience so far, Inert and not degradable. |
| Further information on ecology | With proper handling and use, no environmental Problems are to be expected. |

| 13 Disposal considerations | |
|----------------------------|--|
| Disposal / waste (product) | <p>Unused abrasive:</p> <p>The allocation of the EWC codes / waste Descriptions are to be carried out specific to branch and process in accordance with AAV.</p> <p>List of proposals for EWC codes / waste Description pursuant to AAV. 120117 abrasive Waste with the exception of waste which comes Under 120116.</p> |
| Uncleaned packaging | Can, taking into account the necessary technical Regulations, and after consultation with the Disposal agency, be burned together with Household waste. |

14 Transport information

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| Transport / Automobile | Not dangerous goods within the meaning of These transport regulations. |
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15 Regulations

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| 15.1 Labeling | |
| Labeling in accordance with EC Directive | The preparations are not subject to Labeling requirements under EC Directives. |
| Code letter(s) and description(s) of danger | - |
| Danger-determining component(s) for label | - |
| Danger symbol and Description(s) of danger | - |
| R-sentences | - |
| S-sentences | 26 in case of contact with eyes, immediately Rinse thoroughly with water and consult doctor 37/39 wear suitable protective gloves and Protective goggles when working. |
| comments | - |
| 15.2 National regulations | |
| Major Accidents Ordinance | - |
| Technical guidelines regarding air | - |
| Water endangerment category | Does not endanger water; Classification pursuant to the Administrative Guideline on water-endangering substances (VwVwS), appendix 4 |
| Other regulations, restrictions And banning ordinances | - |

16 Other information

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| Wording of the R-sentences under section 2 | - |
| R-sentences | - |
| Recommended restriction of use | - |
| Reason for change | |
| | <p>The details in this safety data sheet correspond To the best of our knowledge to our findings at The time of printing. The information is intended To provide indications on how to use the product Named in this safety data sheet safely in respect of storage, processing, transport and disposal, the information is not transferable to other products. Insofar as the product named in this safety data Sheet is mingled, mixed or processed, or worked on, the information in this safety data sheet anything to the contrary, cannot be transferred to the new material made in this way.</p> |