

Technical Data Sheet Chilled Iron Grit

Trade Name: Chilled Iron Grit
 Part Reference: CI
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SECTION 1 Chemical Analysis

A recast fused iron abrasive media in granular form. This is a tough and aggressive metal abrasive, which offers a clean cutting edge with every pass. Due to its high aggression and ferrous make up this product is specified for use on ferrous substrates or materials where ferrous cross contamination are acceptable.

| Substance | Chemical Formula | CAS No | EC No | Typical Content | WEL exposure limit |
|----------------------|------------------|-----------|-----------|-----------------|--|
| Iron | Fe | 7439-89-6 | 231-096-4 | 95-97% | 10mg/m ³ inhalable dust 5mg/m ³ respirable dust |
| Carbon | C | 7440-44-0 | 231-153-3 | 0.85-1.2% | |
| Manganese | Mn | 7439-96-5 | 231-105-1 | 0.35-1.2% | 0.5mg/m ³ |
| Silicon | Si | 7440-21-3 | 231-130-8 | 0.4-1.5% | |
| Chromium & compounds | Cr | 7440-47-3 | 231-157-5 | <0.2% | 0.5 mg/m ³ |
| Copper | Cu | 7440-50-8 | 231-159-6 | <0.2% | 1.0 mg/m ³ |
| Nickel Insoluble | NI | 7440-02-0 | 23-111-4 | <0.2% | 0.5 mg/m ³ |

All the chemical elements in chilled iron grit come in an alloyed form and not in a free form

SECTION 2 Physical Properties

| | |
|---------------------|--------------------------------|
| Shape | Angular |
| Colour | Grey |
| Specific Gravity | 7.0 g/cc |
| Bulk Density | 3.5 – 4 g/cc |
| Hardness | 750HV (9 moh) |
| Melting Point | 1500°C |
| Solubility in water | Insoluble |
| Packaging | 25kg woven polypropylene sacks |

SECTION 3 Particle Size Distribution

| | | | | | | |
|--|-----------|-----------|-----------|-----------|-----------|-----------|
| GRADE | G80 | G66 | G55 | G47 | G39 | G34 |
| Product Size (mm) | 2.00-2.80 | 1.70-2.40 | 1.40-2.00 | 1.20-1.70 | 1.00-1.40 | 0.85-1.20 |
| GRADE | G24 | G17 | G12 | G07 | G05 | G02 |
| Product Size (mm) | 0.60-1.00 | 0.42-0.85 | 0.30-0.71 | 0.18-0.42 | 0.12-0.30 | 0.13 |
| Minimum percentage of media between sizes shown varies from 60% to 100% subject to particular grade, full details on request | | | | | | |

SECTION 4 Compliance

This product is REACH compliant. See SDS 35 on our web site.

Manufactured to specification ISO 11124-2:1993 (BS7070;Part E2:1994).

Special Precautions. In use, protection is required to meet threshold limit values for general dusts of 10 mg/m³ (for total inhalable dust) and 5 mg/m³ (respirable dust). Please also note the OELs for amorphous silicon dioxide dust of 6mg/m³(inhalable) and 2.4 mg/m³ (respirable). The user must establish any hazards present in the surface coatings being removed, which may reduce the occupational exposure standard (O.E.S.).

SECTION 5 Disposal

The abrasive must be disposed of in accordance with national legislation (See Section 16) and local regulations. The material as supplied is classed as a non-hazardous inert solid waste. Spent abrasive used as a blasting medium must be disposed of under classification 12 01 16 (waste blasting material containing dangerous substances) or 12 01 17 (waste blasting material other than those mentioned in 12 01 16). The waste producer must determine if hazardous substances in the coating being removed are likely to cause the waste to be hazardous.

SECTION 6 Handling and Storage

Load per pallet should not exceed 1 tonne and the pallets should not be stacked more than two high. Material should be kept dry.