



SECTION V-CONTROL MEASURES

RESPIRATOR PROTECTION: If airborne concentrations exceed recommended exposure limits, a suitable NIOSH/MSHA approved filter respirator should be worn. General ventilation or local exhaust is normally adequate to control dust emissions, if not engineering controls should be utilized.

EYE: Safety glasses with side shields should be worn as minimum protection from impact. Dust goggles should be worn when excessively dusty conditions are present or anticipated.

GENERAL: The use of hard hats and hard toe shoes is recommended. Gloves may be worn to protect from abrasion as well as long sleeve shirts to minimize dermal exposure and potential skin irritation.

SECTION VI-FIRE/EXPLOSION/ REACTIVITY DATA

Product is nonflammable, non-explosive and stable under normal conditions of use, storage and transport.

SECTION VII-SPILL, LEAK, AND DISPOSAL PROCEDURES

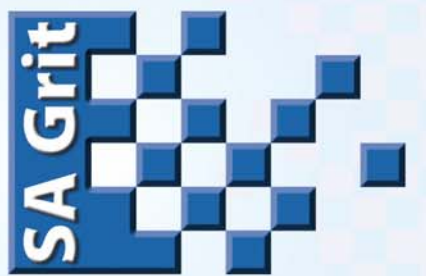
No special procedures required for clean-up, but it is recommended that this is done mechanically or through the use of hand tools. Wetting with water will reduce any airborne dust. Uncontaminated product does not exceed Toxicity Characteristic Leaching Procedure (TCLP) limits and may be disposed of as an inert material in an appropriate solid waste landfill according to applicable Federal, State and Local regulations.

Disclaimer

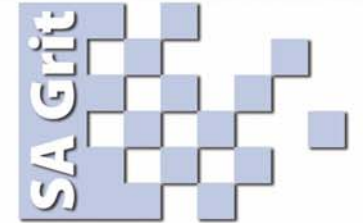
The opinions expressed herein are those of competent personnel within Saudi Abrasives. Saudi Abrasives believes that the information contained herein is current and accurate for the normal and intended use of this product as of the date of this Material Safety Data Sheet. Since the use of this information and of those opinions or the conditions of use of the product are not within the control of Saudi Abrasives, it is the user's obligation to determine and observe the conditions of safe use and disposal of the product by their operations. Saudi Abrasives will not be liable for any loss, damage or injury arising out of the use thereof.

Saudi Abrasives

Coal Slag
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The Ultimate in Expendable Abrasives

INTRODUCTION

SA Grit, is an aluminium silicate blast cleaning abrasive made of coal slag. Typically, it is fused ferro-alumino-silicate of complex composition, formed when the molten slag is quenched in cold water. SA Grit is manufactured in Saudi Arabia by Saudi Abrasives, its **SA** stand for Saudi Arabia and ISO surface preparation standards. It is suitable for SA-3, SA-2 1/2, SA-2, as well as sweep blasting. **SA Grit** coal slag is tough, clean and economical abrasive with less than 1% free silica. it's unique, angular shape and hardness quickly cut away existing coatings.

FEATURES

- Economical
- Less than 1% free silica
- Does not react with coatings
- Reduces coating failure
- Does not attract moisture
- Allows fast and easy clean up
- Angular shape to cut through coatings with high productivity, surface cleanliness and surface profile.
- Free of Chlorides and other Salts.

PHYSICAL PROPERTIES

| | | |
|-------------|---|-------------------|
| Sp. Gravity | : | 2.8 |
| Hardness | : | 7moh |
| Grain shape | : | sharp and angular |
| Colour | : | brown / black |
| Chloride | : | <25ppm |

SPECIAL NOTES

1. All SAGRIT material will achieve SA3 surface finish.
2. The profile depends on the compressed air pressure and we recommend 95 to 100 psi and min 300 cfm per nozzle.

CHEMICAL ANALYSIS

| | | |
|------------------|---|-----------|
| Silicates | : | 48 - 52% |
| Aluminium oxide | : | 22 - 29 % |
| ferric oxide | : | 6 - 17% |
| Pottassium oxide | : | 1 - 5 % |
| magnesium oxide | : | 2 - 5 % |
| total alkalines | : | 2 - 5 % |

The chemical constituents of **SAGRIT** contains less than 1% silica and such present Minimal health hazard. **SAGRIT** is non magnetic, non electricity conducting, non hygroscopic, non inflammable. **SAGRIT** is chemically inert and its residues will not react with Any treated surface.

| Product No. | Size Range (mm) | Cleanliness Standard | Surface Profile Average, Microns | Application |
|--------------|-----------------|----------------------|----------------------------------|---|
| SAGRIT 35055 | 0.2 - 0.5 | Sa 3/SP5 | 45 | Blast cleaning on new steel, and on delicate substrates when a smooth finish is required. |
| SAGRIT 35080 | 0.2 - 1.4 | Sa 3/SP5 | 60 | General blast cleaning on structural steel work, pipes, tanks for achieving a moderate profile. |
| SAGRIT 65100 | 0.5 - 1.5 | Sa 3/SP5 | 80 | General blast cleaning on structural steel work, pipes, tanks for achieving a moderate profile. |
| SAGRIT 75125 | 0.8 - 2.0 | Sa 3/SP5 | 100 | For the tough blasting job and also when a coarse profile required for shipyards, marine structures, tanks and pipes. |
| Turbo | 0.1 - 0.5 | Sa 3/SP5 | 25 | Specifically used for cleaning carbon deposits on the turbine. |

PACKING

- 50 kg paper bags and is normally supplied palletised in units of 1.5 tonne.
- Also available in bulk bags with polythene liners each containing 1.5 tonne.



Material Safety Data Sheet

SECTION I – GENERAL

| | | |
|------------------|----------------|---------------------------|
| Saudi Abrasives | Product Name : | SAGRIT |
| P.O.Box : 30153 | Common Name : | Coal Slag Abrasive |
| Jubail 31951 | Date | : August 8, 2007 |
| Tel : 03-3612342 | | |

SECTION III – PHYSICAL DATA

| | | |
|---------------------|---|------------------------|
| Physical Form | : | Angular granules |
| Specific Gravity | : | 2.8 |
| Hardness | : | 7Moh |
| Bulk density | : | 1.6 kg/dm ³ |
| Melting Temperature | : | > 1250° C |
| Chloride | : | < 25ppm |
| Color | : | Brown / black |
| Evaporation Rate | : | N/A |
| Water Solubility | : | Negligible |
| Odor | : | None |

SECTION II – PRODUCT COMPOSITION

| Component | Normal Composition (WT %) Range | OSHA PEL (mg/m ³) |
|--|---------------------------------|--|
| Silicon Dioxide (SiO ₂) | 48-52% | 80 mg/m ³ %SiO ₂ |
| Free Silica | <1% | 10 mg/m ³ (Respirable Dust) %SiO ₂ +2 |
| Cristobalite | ND * | 30 mg/m ³ (Quartz Total Dust) %SiO ₂ +2 |
| Tridymite | ND * | 80 mg/m ³ (Respirable Dust) %SiO ₂ |
| Aluminum Oxide (Al ₂ O ₃) | 22-29% | 15 mg/m ³ |
| Calcium Oxide (CaO) | 3-15% | 5 mg/m ³ |
| Magnesium Oxide (MgO) | 2- 5% | 15 mg/m ³ (Fume) |
| Iron Oxide (FeO) | 6-17% | 10 mg/m ³ |
| Potassium Oxide (K ₂ O) | 1-5% | NE ** |
| Titanium Dioxide (TiO ₂) | 0-2% | 15 mg/m ³ |
| ND * - Not Detectable | | |
| NE ** - Not Established | | |

SECTION IV – HEALTH HAZARD DATA

EXPOSURE LIMITS: Refer to Section II which highlights the Permissible Exposure Limit (PEL). This limit is published and enforced by OSHA as a legal standard. Most PELs are expressed as eight hour average airborne concentrations. The nuisance dust exposure standard should be followed if exceeded then the appropriate respiratory protection equipment should be worn.

ACUTE and CHRONIC TOXICITY: Exposure to and contact from dust may irritate the respiratory system, eyes, or skin. Coal slag is not listed on the NTP, IARC, or OSHA list of carcinogens. If ingested it may cause nausea and vomiting.

FIRST AID :

1. Eye Contact–Immediately flush eyes thoroughly with water or an ophthalmic saline solution.*
2. Skin Contact–Wash skin with soap and water if irritation occurs.*
3. Inhalation–Remove affected person(s) to fresh air source.*
4. Oral intake–Rinse mouth out with water.*

Note:
if symptoms persist, contact a physician or other medical personnel.

