

Sandblast Stags
Foundry Sands
Empire Blast Equipment
Bullard Safety Equipment
Sandblast Hose & Nozzles
Walnut Shells & Corn Cob Grit
Waterjet & Sandblast Garnet
Schmidt Blast Equipment
Silica Free Abrasives
Steel Shot & Grit
Aluminum Oxide
Glass Beads

MATERIAL SAFETY DATA SHEET

SECTION I - PRODUCT INFORMATION

Black Shot II- Page 1 of 4

| Distributor's Name: BELL & MACKENZIE CO. LTD. | Emergency Phone #: (905) 527-6000 |
|---|---|
| Distributor's Address: 500 Sherman Ave. N., P. O. Box 844, L.C.D. #1. | , Hamilton, Ontario L8N 3N9 |
| Common Name: IRON SILICATE BLEND | |
| A BLEND OF NICKEL SLAG AND COAL SLAG | Chemical Family: CAS #68476-96-0, particulates not otherwise |
| Trade Name & Synonyms: BLACK SHOT II SANDBLAST MEDIA | regulated. |
| | Product Uses: Sandblast sand, non-slip sufaces, roofing granule |

SECTION II - HAZARDOUS INGREDIENTS

| Material or Components | % | OSHA (PEL) (| ONT M.O.L. REG #833 | ACGIH (TLVE) |
|---|------------|------------------------------|--------------------------|-----------------------|
| Silicon Dioxide (SiO ₂) Amorphous, total | 35-40% | 80 mg/m³/%SiO ₂ | N.E. | 10 mg/m ³ |
| CAS #7631-86-9 Silicon Dioxide (quartz) | < 0.1% | 10 mg/m³/%SiO ₂ + | 2 0.10 mg/m ³ | 0.10 mg/m³ |
| CAS #14808-60-7 Aluminum Oxide (Al ₂ O ₃) CAS #1344-28-1 | 2-5% | 15 mg/m³ (total dus | it) 10 mg/m³ | 1 0 mg/m³ |
| Calcium Oxide (CaO) CAS #1305-78-8 | 1-3% | 5 mg/m ³ | 2 mg/m ³ | 2 mg/m³ |
| Magnesium Oxide (MgO) CAS #1309-48-4 | 1-4% | 10 mg/m ³ | 10 mg/m ³ | 10 mg/m ³ |
| Iron Oxide (Fe ₂ O ₃) | 50-55 % | 10 mg/m ³ | 5 mg/m³ | 5 mg/m³ |
| CAS #1309-37-1 Titanium Oxide (TiO ₂) | 0.10-0.40% | 15 mg/m² | 10 mg/m² | 10 mg/m² |
| CAS #13463-67-7 Lead (Pb), elemental CAS #7439-92-1 | < 0.05% | .05 mg/m ³ | $.05 \text{ mg/m}^3$ | .05 mg/m ³ |
| Copper (Cu), elemental CAS #7440-50-8 | 0.2-0.4% | 1 mg/m ³ | 1 mg/m ³ | 1 mg/m³ |
| Zinc (Zn), elemental CAS #1314-13-2 | 1.5-3.0% | 5 mg/m ³ | 2 mg/m ³ | 5 mg/m ³ |
| Chromium (Cr), elemental CAS #7440-47-3 | <0.1% | 1 mg/m ³ | .50 mg/m ³ | 0.5 mg/m ³ |
| Nickel (Ni), elemental CAS #7440-02-0 | .1030% | 1 mg/m³ | 1 mg/m³ | 1.5 mg/m ³ |
| N.E Not Established | <u></u> | | | |

Low health risk by inhalation. Treat as a nuisance dust. Use ACGIH (American Conference of Governmental

Industrial Hygenists) TLV (Threshold Limit Values) for nuisance dust exposure guidelines. This product is a stable, Tel: (905) 527-6000 amorphous glass-like compound. Human toxic response has not been demonstrated for any route of entry Toll Free Tel: 1-888-794-665

Fax: (905) 527-6660

Toll Free Fax: 1-888-794-7263 info@bellandmackenzie.com



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| H.M.I,S | . Hazard Rating | H,M | I.S. Hazard Rating Scale | |
|--|-----------------|--------------|--------------------------|--|
| Health: | 1 | 0 = minimal | 3 = serious | |
| Fire: | 0 | 1 = slight | 4 = severe | |
| Reactivity: | 0 | 2 = moderate | | |
| WHIMS Classification, Class D, div 2B 'material causing other toxic effects' | | | | |

SECTION III - PHYSICAL / CHEMICAL CHARACTERISTICS

| Physical State: | Solid granules | Melting Point: | >2,300°F/1,260°C |
|---------------------------------------|----------------|----------------------------------|-----------------------------|
| Appearance and Odor: | Black, No Odor | Freezing Point: | not applicable |
| Odour Threshold (ppm): | not applicable | pH Level: | not applicable |
| Specific Gravity (H2O = 1): | 3.3 - 3.5 | % Volatile by Volume: | not applicable |
| Vapour Pressure (mm): | not applicable | Solubility in Water: | Insoluble |
| Vapour Density (Air = 1): | not applicable | Coefficient of water/oil distrib | not applicable |
| Evaporation Rate (Butyl Acetate = 1): | not applicable | Bulk Density: | 120-125 lbs/ft ³ |

SECTION IV - FIRE & EXPLOSION HAZARD DATA

| Special Fire Fighting Procedures: | None required | Flammable Limits: | Non-flammable |
|--|---------------|----------------------|----------------|
| Unusual Fire & Explosion Hazards: | None | Flash Point: | not applicable |
| Transportation of Dangerous Goods Classification | ; | Extinguishing Media: | not applicable |
| | Not regulated | Explosion Limits: | Non-explosive |

SECTION V - REACTIVITY DATA

| Stability: | Stable | Hazardous Decomposition Products: No | one |
|---------------------------------------|----------------|--|--------|
| Incompatibility (Materials to Avoid): | None | Reactivity & under what conditions: Stable under norma | al |
| Hazardous Polymerization: | not applicable | conditions of use, storage, and transport | ation. |

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SECTION VI - TOXICOLOGICAL PROPERTIES

| Carcinogenicity: | NTP: No | OSHA Regulated: No | IARC Monographs: | No |
|------------------------|-------------------|-----------------------------|------------------|----|
| Routes of Entry: | Skin: No | Inhalation: low health risk | Ingestion: No | |
| Threshold Limit Value: | None Established. | See Section VI. | | |

Treat as a nuisance dust. Typical free silica crystalline (quartz) content is less than 0.10%. Human toxic response has not been demonstrated for any route of entry. Mechanical irritation may occur to eyes, skin, or respiratory tract. Pre-existing health conditions may be aggravated. Pneumonconisosis may be possible from chronic over exposure. Contains less than 0.10 - 0.30% Nickel. The International Agency for Researc on Cancer (IARC) (Vol 49) has determined that elemental nickel is possibly carcinogenic to humans (group 2B) and the National Toxicological Program (NTP) has determined that elemental nickel may reasonably be anticipated to be a carcinogen.

Under WHIMS legislation any product containing 0.10% or more of a "known carcinogen" must be divulged for hazard communication purposes. This is not an assessment of risks. It is believed that if the PEL is not exceeded and recommended best practices and precautions are followed that this product will not be a health hazard.

| Group 2B Carcinogen: Possibly carcinogenic to humans - One set of criteria used in this category is when there is insufficient evidence for carcinogenicity in humans and limited or sufficient evidence in experimental animals. | | |
|---|---|--|
| Effects of Overexposure: | Short Term: No effect other than as a nuisance dust. Long Term: As with any nuisance dust, long-term exposure to dust concentrations higher than recommended Permissible Exposure Limit (PEL) may cause | |
| | delayed lung injury. | |

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SECTION VII - PREVENTATIVE MEASURES & PRECAUTIONS FOR SAFE HANDLING & USE

| Steps to be taken in case material is released or spilled: | | No special procedures required for clean-up. Wetting with water will reduce airborne dust. | | |
|--|--|--|--|--|
| Waste Disposal Method: | If uncontamina | ted this product may be disposed of as an inert non-hazardous | | |
| · | material in an a | material in an appropriate solid waste landfill according to applicable Federal, | | |
| | State/Provincia | and Local Regulations. | | |
| Other Precautions: | If material is us | sed for abrasives, equipment used must be frequently inspected | | |
| | | y replacement. Avoid creation of respirable dust. | | |
| | | e NIOSH certified respiratory protection, as required by OSHA for | | |
| • | exposure above PEL. | | | |
| Ventilation: | Keep dust leve | l below PEL. Maintain sufficient ventilation to allow visual contact | | |
| | with work surfa | aces. | | |
| Eye Protection: | Hood with protective lenses and or safety glasses. | | | |
| Protective Gloves: | Standard abrasive blaster's gloves. | | | |
| Other Protective Equipment: | Use appropriate abrasive blasting protective equipment. | | | |
| Work Hygiene Practices: | Thoroughly wash hands and face prior to eating or smoking. | | | |
| Other Precautions: | Keep dry and f | ree of all contamination to assure free flow. Use an appropriate | | |
| | safety screen o | ver fill hatch of blasting pot. Respirable dust may be generated | | |
| | during pressure | e abrasive cleaning operations. | | |

SECTION VIII - FIRST AID & EMERGENCY MEASURES

Eye Contact:

Skin Contact:

Wash skin with cold water & soap if irritation occurs.

Inhalation:

Remove affected person(s) to fresh air source.

Oral Intake:

Rinse mouth out with water.

If symptoms persist, contact a physician or other medical personnel.

"The opinions expressed herein have been compiled from sources which the company believes to be dependable, and is accurate and reliable for the normal and intended use of this product as of the date of this Material Safety Data Sheet. However, the company makes no warranty of any kind with respect to the accuracy or completeness of the data and assumes no responsibility for any liability or damages relating thereto. It is the user's obligation to determine and observe the conditions of safe use and disposal of the product by their operations."

Date of Preparation: May 24, 2013

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Richard A. Bell