

Ebony Grit

SECTION 1. IDENTIFICATION

Product Identifier	Ebony Grit
Other Means of Identification	Not applicable
Other Identification	Granulated Copper Slag
Recommended Use	Blasting media.
Manufacturer/Supplier Identifier	Opta Minerals Inc., 407 Parkside Drive P.O. Box 260, Waterdown, Ontario, Canada, L0R 2H0, (905) 689-7361, www.optaminerals.com
Emergency Phone No.	CHEMTREC (Canada & USA), 1-800-424-9300, 24 hours CHEMTREC, (outside North America), 1-703-527-3887, 24 hours
SDS No.	1044

SECTION 2. HAZARD IDENTIFICATION

Classified according to Canada's Hazardous Products Regulations (WHMIS 2015) and the US Hazard Communication Standard (HCS 2012).

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	%	Other Identifiers
Iron Oxide	1309-37-1	53-60	Fe ₂ O ₃
Fused Silica (Amorphous)	60676-86-0	31-37	SiO ₂
Aluminum oxide	1344-28-1	3-6	Al ₂ O ₃
Calcium oxide	1305-78-8	1-4	CaO
Magnesium oxide	1309-48-4	1-2	MgO
Crystalline Silica Quartz	14808-60-7	<0.1	SiO ₂
Other trace oxides		<2	

SECTION 4. FIRST-AID MEASURES

First-aid Measures

Inhalation

Move to fresh air. If experiencing respiratory symptoms (e.g. coughing, shortness of breath, wheezing), call a Poison Centre or doctor.

Skin Contact

Wash gently and thoroughly with lukewarm, gently flowing water and mild soap for 5 minutes.

Eye Contact

Immediately rinse the contaminated eye(s) with lukewarm, gently flowing water for 15-20 minutes, while holding the eyelid(s) open.

If eye irritation persists, get medical advice or attention.

Ingestion

Product Identifier:	Ebony Grit
SDS No.:	1044
Date of Preparation:	January 24, 2017

Never give anything by mouth if person is rapidly losing consciousness, or is unconscious or convulsing. Do not induce vomiting. Call a Poison Centre or doctor if you feel unwell.

Most Important Symptoms and Effects, Acute and Delayed

If in eyes:

May cause moderate to severe irritation.

Immediate Medical Attention and Special Treatment

Target Organs

Respiratory system.

SECTION 5. FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media

Not combustible. Use extinguishing agent suitable for surrounding fire.

Unsuitable Extinguishing Media

Not applicable.

Specific Hazards Arising from the Product

Does not burn.

This product presents no unusual hazards in a fire situation.

Not known to generate any hazardous decomposition products in a fire.

Special Protective Equipment and Precautions for Fire-fighters

Wear self contained breathing apparatus.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment, and Emergency Procedures

Use the personal protective equipment recommended in Section 8 of this safety data sheet. Review Section 7 (Handling) of this safety data sheet before proceeding with clean-up.

Environmental Precautions

It is good practice to prevent releases into the environment.

Methods and Materials for Containment and Cleaning Up

Avoid generating dust. Collect using shovel/scoop or approved HEPA vacuum and place in a suitable container for disposal.

SECTION 7. HANDLING AND STORAGE

Precautions for Safe Handling

Avoid generating dusts. Wear personal protective equipment to avoid direct contact with this chemical. Avoid repeated or prolonged skin contact with product or with contaminated equipment/surfaces.

It is good practice to: avoid breathing product; avoid skin and eye contact and wash hands after handling. Wash hands thoroughly after handling this product and before eating, using the washroom or leaving work area. Remove contaminated clothing and protective equipment before entering eating areas or leaving work area.

Conditions for Safe Storage

Store in an area that is: dry.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

Chemical Name	ACGIH TLV®		OSHA PEL		AIHA WEEL	
	TWA	STEL	TWA	Ceiling	8-hr TWA	TWA

Product Identifier: Ebony Grit

SDS No.: 1044

Date of Preparation: January 24, 2017

Iron Oxide	5 mg/m3 * A4		10 mg/m3 *			
Aluminum oxide	1 mg/m3 * A4		5 mg/m3 *			
Calcium oxide	2 mg/m3		5 mg/m3			
Magnesium oxide	10 mg/m3 * A4		15 mg/m3			
Fused Silica (Amorphous)	0.1 mg/m3					

* respirable total dust, OSHA (PEL)= 15 mg/m3 crystalline Silica, ACGIH, TWA, 0.10 mg / m3 (ACGIH), 0.025 mg /m3, respirable.

Appropriate Engineering Controls

Do not allow product to accumulate in the air in work or storage areas, or in confined spaces. Use local exhaust ventilation, if general ventilation is not adequate to control amount in the air.

Individual Protection Measures

Eye/Face Protection

Wear chemical safety goggles and face shield when contact is possible. Do not get in eyes.

Skin Protection

Avoid repeated or prolonged skin contact. Always wear insulated protective clothing, if contact is possible.

Respiratory Protection

Wear a NIOSH approved air-purifying respirator with N95 or higher rating filter(s).

In conditions where the levels of airborne dust exceed the capabilities of the above referenced respirators, a supplied-air respirator may be necessary.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Basic Physical and Chemical Properties

Appearance	Black shiny.
Odour Threshold	Not applicable
pH	Not applicable
Melting Point/Freezing Point	Not applicable (freezing)
Initial Boiling Point/Range	Not applicable
Flash Point	Not applicable
Evaporation Rate	Not applicable
Upper/Lower Flammability or Explosive Limit	Not applicable (upper); Not applicable (lower)
Vapour Pressure	Not applicable
Vapour Density (air = 1)	Not applicable
Relative Density (water = 1)	Not available
Solubility	Not applicable in water
Partition Coefficient, n-Octanol/Water (Log Kow)	Not applicable
Auto-ignition Temperature	Not applicable
Other Information	
Physical State	Solid

SECTION 10. STABILITY AND REACTIVITY

Chemical Stability

Normally stable.

Possibility of Hazardous Reactions

Not applicable.

Product Identifier: Ebony Grit
SDS No.: 1044
Date of Preparation: January 24, 2017

Conditions to Avoid

Generation of dust.
Water.

Hazardous Decomposition Products

Not applicable.

SECTION 11. TOXICOLOGICAL INFORMATION**Likely Routes of Exposure**

Inhalation. Skin contact. Eye contact. Ingestion.

Acute Toxicity

Chemical Name	LC50	LD50 (oral)	LD50 (dermal)
Iron Oxide	Not available	> 10,000 mg/kg (rat)	Not available
Aluminum oxide	Not available	> 5,000 mg/kg (rat)	Not available
Calcium oxide	Not available	> 2,000 mg/kg (rat)	Not available
Magnesium oxide	Not available	810 mg/kg (mouse)	Not available
Fused Silica (Amorphous)	Not available	Not available	Not available

Skin Corrosion/Irritation

May cause irritation.
May cause skin irritation.

Serious Eye Damage/Irritation

May cause moderate to severe irritation.
May cause moderate to severe irritation.

STOT (Specific Target Organ Toxicity) - Single Exposure**Inhalation**

Can irritate the respiratory system.

Skin Absorption

May cause irritation.

Ingestion

May cause irritation of the mouth, throat and stomach.

STOT (Specific Target Organ Toxicity) - Repeated Exposure

May cause irritation of the respiratory system.

Respiratory and/or Skin Sensitization

May cause respiratory or skin sensitization based on limited evidence.

Carcinogenicity

Contains less than 0.1% crystalline silica

Reproductive Toxicity**Development of Offspring**

There is no evidence this product contributes Teratogenicity or Embryotoxicity.
There is no evidence this product contributes Teratogenicity or Embryotoxicity properties.

Sexual Function and Fertility

No ingredients in this product are known to contribute to reproductive toxicity.
No ingredients in this product are known to contribute to reproductive toxicity.

Germ Cell Mutagenicity

Not known to be a mutagen.
No ingredients in this product are known to cause mutagenicity.

Interactive Effects

Product Identifier: Ebony Grit
SDS No.: 1044
Date of Preparation: January 24, 2017

None known.
None known.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Although this product is not classified as an environmentally hazardous material, large or frequent spills may cause potential problems.

Persistence and Degradability

This product is not biodegradable.

Bioaccumulative Potential

This product and its degradation products are not known to bioaccumulate.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal Methods

Dispose of waste in compliance with applicable Federal, State, Provincial and Local Regulations.

SECTION 14. TRANSPORT INFORMATION

Not regulated under Canadian TDG regulations. Not regulated under US DOT Regulations.

Special Precautions Not applicable

Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15. REGULATORY INFORMATION

Safety, Health and Environmental Regulations

Canada

WHMIS 1988 Classification

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the SDS contains all of the information required by the Controlled Products Regulations.

Domestic Substances List (DSL) / Non-Domestic Substances List (NDSL)

All ingredients are listed on the DSL/NDSL.

Custom Regulatory 1

Employee exposure monitoring should be performed when using this product to determine exposure levels to not only the oxides contained in this product, but also the material being blasted.

SECTION 16. OTHER INFORMATION

NFPA Rating **Health - 0** **Flammability - 0** **Instability - 0**

SDS Prepared By Dave Rumble

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Key to Abbreviations ACGIH® = American Conference of Governmental Industrial Hygienists
OSHA = US Occupational Safety and Health Administration
HSDB® = Hazardous Substances Data Bank

References CHEMINFO database. Canadian Centre for Occupational Health and Safety (CCOHS).
Registry of Toxic Effects of Chemical Substances (RTECS®) database. Dassault
Systèmes/BIOVIA ("BIOVIA"). Available from Canadian Centre for Occupational Health and
Safety (CCOHS). HSDB® database. US National Library of Medicine. Available from Canadian

Product Identifier: Ebony Grit

SDS No.: 1044

Date of Preparation: January 24, 2017

Centre for Occupational Health and Safety (CCOHS). NIOSH Pocket Guide database. National Institute for Occupational Safety and Health. Available from Canadian Centre for Occupational Health and Safety (CCOHS).

Disclaimer

To the best of our knowledge, the information contained herein is accurate.

Although certain hazards are described herein, we can not guarantee that these are the only hazards that exist.

Opta Minerals Inc. assumes no liability arising out of the use of this product by others.

Product Identifier: Ebony Grit
SDS No.: 1044
Date of Preparation: January 24, 2017

Page 06 of 06