

# K & E Sand and Gravel

## **2040 Black** **Safety Data Sheet**

*Prepared March 21<sup>st</sup> 2024*

### **SECTION 1. IDENTIFICATION**

**Product Identifier:** 2040 Black

**Other Means of Identification:** Not applicable

**Other Identification:** Granulated Copper Slag

**Supplier:** K&E Sand and Gravel, [www.KESand.ca](http://www.KESand.ca)

**Recommended Use:** Blasting Media

**SDS No.**1345

**Emergency Phone No.:** CHEMTREC (Canada & USA), 1-800-424-9300, 24 hours

### **SECTION 2. HAZARD IDENTIFICATION**

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

#### **Other Hazards**

Prior to blasting, the potential hazards of the blasted material (paints, coatings etc). should be investigated.

Standard (HCS 2012).

### **SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

<b>INGREDIENT</b>	<b>%</b>	<b>CAS #</b>	<b>Other Identifiers</b>
Iron Oxide	53-60	1309-37-1	Fe2O3
Fused Silica (Amorphous)	31-37	7631-86-9	SiO2
Aluminum Oxide	3-6	1344-28-1	Al2O3
Calcium Oxide	1-4	1305-78-8	CaO
Magnesium Oxide	1-2	1309-48-4	MgO
Crystalline silica Quartz	<0.1	7631-86-9	SiO2
Other trace oxides	<2.0		

## **SECTION 4. 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**

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
	TWA	TWA
Iron Oxide	5 mg/m <sup>3</sup> * A4	10 mg/m <sup>3</sup> *
Aluminum oxide	1 mg/m <sup>3</sup> * A4	5 mg/m <sup>3</sup> *
Calcium oxide	2 mg/m <sup>3</sup>	5 mg/m <sup>3</sup>
Magnesium oxide	10 mg/m <sup>3</sup> *A4	15 mg/m <sup>3</sup>
Amorphous Silica		5 mg/m <sup>3</sup> *

\* Respirable Total dust, OSHA (PEL)= 5 mg/m<sup>3</sup>

### 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**

### **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.

### **Eye/Face Protection**

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

## **SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

### **Basic Physical and Chemical Properties**

**pH** Not applicable

**Appearance** Black shiny.

**Partition Coefficient, n-Octanol/Water (Log Kow)** Not Applicable

**Vapour Pressure** Not applicable

**Odour Threshold** Not applicable

**Vapour Density (air = 1)** Not applicable

**Initial Boiling Point/Range** Not applicable

**Evaporation Rate** Not applicable

**Flash Point** Not applicable

**Melting Point/Freezing Point** Not applicable (freezing)

**Relative Density (water = 1)** Not available

**Upper/Lower Flammability or Explosive Limit** Not applicable (upper); Not applicable (lower)

**Solubility** Not applicable in water

**Auto-ignition Temperature** Not applicable

**Physical State** Solid

## **SECTION 10. STABILITY AND REACTIVITY**

### **Chemical Stability**

Normally stable.

### **Conditions to Avoid**

Generation of dust.

Water.

### **Hazardous Decomposition Products**

Not applicable.

### **Possibility of Hazardous Reactions**

Not applicable.

## SECTION 11. TOXICOLOGICAL INFORMATION

### Likely Routes of Exposure

Inhalation. Skin contact. Eye contact. Ingestion.

### Acute Toxicity

Chemical Name	LD50 (Oral)
Iron Oxide	> 10,000 mg/kg (rat)
Aluminum oxide	> 5,000 mg/kg (rat)
Calcium oxide	> 2,000 mg/kg (rat)
Magnesium oxide	810 mg/kg (mouse)
Amorphous Silica	10,000 mg/kg (rat)

### 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**

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.

**Bioaccumulative Potential**

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

**Persistence and Degradability**

This product is not biodegradable.

**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.

## **USA**

### **Toxic Substances Control Act (TSCA) Section 8(b)**

All ingredients are listed on the TSCA Inventory.

### **Additional USA Regulatory Lists**

California Proposition 65: Crystalline silica (airborne particulates of respirable size) is known by the State of California to cause cancer.

### **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 - 1 Flammability - 0 Instability - 0

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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 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.  
Edgewater Construction Co. assumes no liability arising out of the use of this product by others.