

**Material Safety  
Data Sheet  
CR 456 Z**



Date Issued: 10/30/2007  
Date-Revised: New MSDS  
Product Code:: 45640  
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**SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION**

Product Name: **CR 456 Z**                      **Grit Range: 36 - 120**  
Synonyms:     N/A

Product Use:     Coated abrasive product

Manufacturer:    HERMES ABRASIVES, LTD.  
                         524 Viking Drive  
                         Virginia Beach, VA 23452  
                         Ph. No.: (757) 486-6623  
                         Fax No.: (757) 431-2370  
                         E-mail:     www.hermesabrasives.com

24-Hour Emergency Telephone Numbers: CHEMTREC (U.S.):            (800) 424-9300

**SECTION 2 - HAZARDOUS INGREDIENTS**

<b><u>INGREDIENTS</u></b>	<b><u>C.A.S. NO.</u></b>	<b><u>&amp; BY WEIGHT</u></b>
Aluminum Oxide	1344-28-1	24.0 - 37.0
Quartz	14808-60-7	<1.0
Trisodium Hexafluoroaluminate	15096-52-3	5.0 - 8.0
Potassium-tetrafluoroborate	14075-53-7	6.0 - 8.0
Calcium Carbonate	1317-65-3	2.0 - 3.0

**Note:** The user of this product should perform an assessment of the workpiece material(s) to fully understand the scope of hazards associated with the use of this product.

**SECTION 3 - HAZARDS IDENTIFICATION**

There are no known hazards associated with the abrasive product itself other than what is contained in the **Exposure Controls** section of this document.

There can be hazards associated with the use of this product. Always review completely all operational instructions provided by the manufacturer of any tools or machinery that this product may be used with. It is also recommended that before this product is used for grinding purposes, a risk assessment should be performed on the material being abraded.

**Potential Health Effects**

**Inhalation:** Exposure to dust generated from the use of this product can result in respiratory system irritation. Signs/symptoms may include throat or nasal irritation, wheezing, coughing, congestion, or headaches.

**Eye Contact:** Eye irritation. Signs/symptoms may include redness, discomfort, or in some cases, scratching of the corneal tissue.

**Skin Contact:** Skin irritation. Signs/symptoms may include itching, abrasion, or redness.



**Ingestion:** Harmful if swallowed.

**Cancer:** None of the components present in this material at concentrations equal to or greater than 0.1% are listed by the IARC, NTP, OSHA or ACGIH as a carcinogen. Suspect cancer hazard (contains material which) may cause cancer.

#### **SECTION 4 - FIRST AID MEASURES**

**Inhalation:** Move exposed person to fresh air. If signs/symptoms persist, seek medical attention.

**Eye Contact:** Immediately flush eye with water. If signs/symptoms persist, seek medical attention.

**Skin Contact:** Wash affected area with soap and water. If signs/symptoms persist, seek medical attention.

**Ingestion:** No treatment expected. If signs/symptoms persist, seek medical attention.

#### **SECTION 5 - FIRE FIGHTING MEASURES**

Toxic fumes may occur, Use respiratory protective equipment.

Extinguishing Media: water, foam, sand powder or CO<sub>2</sub> as appropriate for surrounding materials.

#### **SECTION 6 - ACCIDENTAL RELEASE MEASURES**

**Personal precautions:**

Refer to protective measures listed in Sections 7 & 8.

**Environmental precautions:**

No special measures necessary.

**Methods for cleaning up/taking up:**

Avoid raising dust. Pick-up, sweep-up or vacuum and place in container for disposal.

#### **SECTION 7 - HANDLING AND STORAGE**

This product should be inspected carefully prior to use for cracks or tears. Damaged product can break apart during use and cause serious injury. Personal protective equipment should be worn to protect the eyes, face and hands. Dust and particulate generated from the use of this product can cause injury to the respiratory system if proper respiratory equipment is not worn during use. Sparks can be generated from the use of this product. Care should be taken to prevent fires.

Product should be stored in a cool dry place. Recommended conditions: 68 (±2)<sup>o</sup>F, [20°C], 45-65% relative humidity.



## SECTION 8 – EXPOSURE CONTROLS / PERSONAL PROTECTIVE EQUIPMENT

A risk assessment should be performed before using this product. Local mechanical exhaust ventilation is recommended while using this product to control airborne dust, fumes, and/or particulate. Respiratory protection equipment is also recommended. Refer to Section 2 for Occupational Exposure Limits of key ingredients and dust. See below for specific recommended personal protective equipment.

### Respiratory Protection:

Avoid breathing fumes and dust generated by the use of this product. Select and use an OSHA-approved respirator based upon the airborne concentrations of this abrasive's ingredients and the workpiece material being abraded to prevent overexposure.

### Skin Protection:

Care should be taken to avoid contact with the skin. Use appropriate gloves and protective clothing to minimize skin contact and reduce the possibility of physical abrasion.

### Eye Protection:

Always wear eye and face protection. Goggles or full face shield are recommended.

### Hearing Protection:

Hearing protection may be desired, depending on specific application or machinery.

### Exposure Limit Values:

INGREDIENT	C.A.S. NO.	E.C. NO.	OSHA PEL (mg/m <sup>3</sup> )		ACGIH / TWA (mg/m <sup>3</sup> )	
			TOTAL	RESPIRABLE	TOTAL	RESPIRABLE
Aluminum Oxide	1344-28-1	215-691-6	15	5	10	
Quartz (Silica, Crystalline)	14808-60-7	238-878-4	0.05			0.05
Trisodium Hexafluoroaluminate	15096-52-3	239-148-8		2.5		2.5
Potassium-tetrafluoroborate	14075-53-7	237-928-2		2.5		2.5
Calcium Carbonate	1317-65-3	215-279-6	15	5	10	5
Dust			10	3		

## SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

<b>General Physical Form:</b>	Solid
<b>Flash Point:</b>	Not Applicable
<b>Boiling Point:</b>	Not Applicable
<b>Melting Point:</b>	Not Applicable
<b>Specific Gravity:</b>	Not Applicable
<b>Solubility in Water:</b>	Insignificant



## SECTION 10 – STABILITY AND REACTIVITY

<b>Stability:</b>	Coated abrasives are stable when handled or stored.
<b>Reactivity:</b>	Unknown.
<b>Conditions to avoid:</b>	No decomposition in normal use.
<b>Materials to avoid:</b>	No dangerous reactions known.
<b>Hazardous decomposition:</b>	At temperatures exceeding 482°F (250°C) hazardous or toxic decomposition products may be generated.

## SECTION 11 – TOXICOLOGICAL INFORMATION

### Acute Toxicity

Acute oral toxicity	No data available.
Acute dermal toxicity	No data available.
Acute inhalation toxicity	No data available.

### Irritant/Corrosive Effects

Irritant effect on skin	In case of prolonged, frequent contact, irritation is possible.
Irritant effect on eyes	In case of prolonged, frequent contact, irritation is possible.

**Sensitization** No data available.

### Effects after repeated or prolonged exposure (sub-acute, sub-chronic, chronic)

**Mutagenicity** No data available.

**Reproduction toxicity** No data available.

### Carcinogenicity

CAS No.:	14808-60-7
IARC:	Group 1 carcinogen

### Experience in practice

Repeated and prolonged skin contact may lead to defatting and irritation of the skin.

## SECTION 12 – ECOLOGICAL INFORMATION

### Ecotoxic effects

<b>Fish Toxicity:</b>	No data available
<b>Daphnia toxicity:</b>	No data available
<b>Algae toxicity:</b>	No data available
<b>Bacteria toxicity:</b>	No data available
<b>General Information / Ecology:</b>	Do not discharge product unmonitored into the environment



## SECTION 13 - DISPOSAL CONSIDERATIONS

**Product:**

Dispose in accordance with federal, state and local regulations.

**Packaging:**

Uncontaminated packaging may be taken for recycling.

Packaging that cannot be cleaned should be disposed of as a product waste.

**It is highly recommended to consult all applicable local, state and national regulations regarding waste disposal in your area.**

## SECTION 14 - TRANSPORT INFORMATION

This product is not defined under USDOT, IMDG, GGVSee, or ICAO/IATA regulations as a hazardous material.

## SECTION 15 - REGULATORY INFORMATION

**U.S. Federal Regulations:**

**TSCA (Toxic Substances Control Act)**

This product is an article as defined by TSCA regulations, and is exempt from TSCA Inventory listing requirements.

**Clean Water Act (CWA)**

None of the ingredients are listed.

**Clean Air Act**

None of the ingredients are listed.

**OSHA: Hazardous by definition of the Hazard Communication Standard (29 CFR 1910.1200)**

The following ingredients are hazardous by definition of Hazard Communication Standard:

CAS No: 14075-53-7; 14808-60-7; 15096-52-3; 1317- 65-3;

**SARA Section 302 (RQ)**

None of the ingredients are listed.

**SARA Hazard Category (Section 311/312)**

Not classified as hazardous in accordance with the regulations.

**SARA Section 313 Information**

None of the ingredients are listed.

**HAPS (Hazardous Air Pollutants)**

None of the ingredients are listed.

**IARC**

None of the ingredients are listed.

**NTP Report on Carcinogens**

The following ingredients are listed:

CAS No.: 14808-60-7

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**State Regulations:**

New Jersey Worker and Community Right to Know Act

The following ingredients are listed:

CAS No.: 14808-60-7; 15096-52-3; 1344-28-1

California Proposition 65

This product contains a substance known to the state of California to cause cancer.

CAS No.: 14808-60-7 Silica, Crystalline.

Pennsylvania Hazardous Substance List

The following ingredients are listed:

CAS No.: 14808-60-7; 15096-52-3; 1317-65-3

**Canada Federal Regulations**

Workplace Hazardous Materials Information System (WHMIS) – Canada

WHMIS Classification: Not a controlled product. This product meets the definition of a “manufactured article” under WHMIS regulations.

**SECTION 16– OTHER INFORMATION**

**HMIS Classification**

Flammability: 1  
Health: 1  
PPE: B  
Reactivity: 0

**NFPA Rating**

Fire Hazard: 1  
Health: 1  
Reactivity: 0

This data is based on our present knowledge and do not signify any warranty with regard to the properties of the products. Observance of existing laws and regulations is the sole responsibility of the consumer.

**Other Information**

**Abbreviations:**

ACGIH American Conference of Government Industrial Hygienists  
CAS Chemical Abstract Number  
HAPS Hazardous Air Pollutants  
HMIS Hazardous Material Identification System  
IARC International Agency for Research on Cancer  
IDLH Immediately Dangerous to Life and Health  
LEL Lower Explosion Limit  
NTP National Toxicology Program  
OEL Occupational Exposure limit  
OSHA Occupational Safety and Health Administration  
PEL Permissible Exposure Limit  
PPE Personal Protective Equipment  
SARA Superfund Amendments and Reauthorization Act  
STEL Short Term Exposure Limit  
TWA Time Weighted Average (8-hours)

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UEL Upper Explosion Limit  
VOC Volatile Organic Compound  
WEEL Workplace Environmental Exposure Level

**Department Issuing Material Safety Data Sheet**

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Virginia Beach, VA 23452

This information is based on our present state of knowledge. However, it should not constitute a guarantee for any specific product properties and shall not establish a legally valid relationship.