



# SAFETY DATA SHEET

## 1. Identification

**Product identifier** Epic C  
**Recommended use** For Industrial Use Only  
**Recommended restrictions** Users should be informed of the potential presence of respirable dust and respirable crystalline silica as well as their potential hazards. Appropriate training in the proper use and handling of this material should be provided as required under applicable regulations.

## Manufacturer/Supplier information

**Company name:** FRC Global  
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**Emergency telephone number:** Corporate Office: (514) 931-5711  
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## 2. Hazard(s) identification

**Physical hazards** Not classified  
**Health hazards** Carcinogenicity Category 1A  
**Environmental hazards** Not classified  
**OSHA defined hazards** Not classified  
**Label Elements**



**Signal Word** Danger  
**Hazard Statement** May cause cancer.  
**Precautionary statement**  
**Prevention** Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves/protective clothing/eye protection.  
**Response** If concerned: Get medical advice/attention.  
**Storage** Store locked up.

<b>Disposal</b>	Dispose of contents/container in accordance with local/regional/national/international regulations
<b>Hazard(s) not otherwise Classified (HNOC)</b>	None Known.
<b>Supplemental information</b>	Users should be informed of the potential presence of respirable dust and respirable crystalline silica as well as their potential hazards. Overexposure to the respirable dust of crystalline silica (quartz or cristobalite, less than or equal to 5 microns in size) may lead to silicosis in humans, which is a progressive and irreversible lung disease. Appropriate training in the proper use and handling of this material should be provided as required under applicable regulations.

### 3. Composition/information on ingredients

Chemical Name	Common Name/Synonyms	CAS Number	%
Aluminum Oxide (Non-Fibrous)		1344-28-1	*
Magnesium Oxide		1309-48-4	*
Chromic Oxide		1305-78-8	*
Silica	Quartz	14808-60-7	*

\*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

### 4. First-aid measures

<b>Inhalation</b>	Move to fresh air. Call a physician if symptoms develop or persist.
<b>Skin contact</b>	Wash off with soap and water. Get medical attention if irritation develops and persists.
<b>Eye contact</b>	Do not rub your eyes. Rinse with water. Get medical attention if irritation develops and persists.
<b>Ingestion</b>	Rinse mouth. Get medical attention if symptoms occur.
<b>Most important symptoms/effects, acute and delayed</b>	Dust may irritate the respiratory tract, skin, and eyes. Coughing.
<b>Indication of immediate medical attention and special treatment needed</b>	Provide general supportive measures and treat symptomatically. Keep the victim under observation. Symptoms may be delayed.
<b>General information</b>	If concerned: Get medical advice. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

### 5. Fire-fighting measures

<b>Suitable extinguishing media</b>	Use fire-extinguishing media appropriate for surrounding materials.
<b>Unsuitable extinguishing media</b>	Not available.

**Specific hazards arising from the chemical**

Not available.

**Special protective equipment and precautions for firefighters**

Not available.

**Special Remarks on Fire Hazards**

Chlorine Trifluoride reacts violently with Aluminum Oxide producing a flame.

## 6. Accidental release measures

**Personal precautions, protective equipment, and emergency procedures**

Keep unnecessary personnel away. Keep people away from, and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Use a NIOSH/MSHA-approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

**Methods and materials for containment and cleaning up**

Stop the flow of material if this is without risk. Collect dust using a vacuum cleaner equipped with a HEPA filter.

Large Spills: Wet down with water and dike for later disposal. Shovel the material into a waste container. Avoid the generation of dust during clean-up. Following product recovery, flush the area with water.

Small Spills: Sweep up or vacuum up spillage and collect it in a suitable container for disposal. For waste disposal, see section 13 of the SDS.

**Environmental precautions**

Avoid discharge into drains, water courses, or onto the ground.

## 7. Handling and storage

**Precautions for safe handling**

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Minimize dust generation and accumulation. Provide appropriate exhaust ventilation at places where dust is formed. Do not breathe dust. Do not breathe dust. Avoid prolonged exposure. Should be handled in closed systems, if possible. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

**Conditions for safe storage, including any incompatibilities**

Store locked up. Store in the original tightly closed container. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS).

## 8. Exposure controls/personal protection

## Occupational exposure limits

### US OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

<i>Components</i>	<i>Type</i>	<i>Value</i>	<i>Form</i>
Aluminum Oxide (Non-Fibrous) (CAS 1344-28-1)	PEL	5 mg/m <sup>3</sup>	Respirable fraction
Iron oxide (CAS 1309-37-1)	TWA	10mg/m <sup>3</sup>	Respirable fraction
Silicon Dioxide (CAS 14808-60-7)	PEL	6mg/m <sup>3</sup>	
Magnesium Oxide (1309-48-4)	TWA	15mg/m <sup>3</sup>	Total Particulate
Chrome Oxide (CAS 1308-31-2)	TWA	1mg/m <sup>3</sup>	

#### Biological limit values

No biological exposure limits were noted for the ingredient(s).

#### Exposure guidelines

The resin binder in this product was specifically engineered to have low toxicity, with minimal free-phenol (less than 100ppm in this refractory product) and no free-formaldehyde. Under certain conditions, thermal decomposition products may still include carbon monoxide, carbon dioxide, formaldehyde, phenol, and aromatic and/or aliphatic compounds.

#### Appropriate engineering controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and an emergency shower must be available when handling this product.

#### Individual protection measures, such as personal protective equipment

##### Eye/face protection

Wear safety glasses with side shields (or goggles).  
Chemical respirator with organic vapor cartridge, full facepiece, dust, and mist filter.

##### Skin protection

Hand protection  
Other

Wear appropriate chemical-resistant gloves.  
Use of an impervious apron is recommended.

##### Respiratory protection

Use a NIOSH/MSHA-approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits.

##### Thermal hazards

Wear appropriate thermal protective clothing, when necessary.



## General Hygiene Considerations

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

## 9. Physical and chemical properties

### Appearance

Physical state Solid.  
Form Solid.  
Color Not available.

Odor Not available.

Odor threshold Not available.

pH Not available.

Melting point/freezing point Not available.

Initial boiling point and boiling range  
Not available.

Flash point Not available.

Evaporation rate Not available.

Flammability (solid, gas) Not available.

Upper/lower flammability or explosive limits

Flammability limit - lower (%)  
Not available.

Flammability limit - upper (%)  
Not available.

Explosive limit - lower (%)  
Not available.

Explosive limit - upper (%)  
Not available.

Vapor pressure Not available.

Vapor density Not available.

Relative density Not available.

Solubility(ies)

Solubility (water) Not available.

Partition coefficient (n-octanol/water)  
Not available.

Auto-ignition temperature Not available.

Decomposition temperature Not available.

Viscosity Not available.

## 10. Stability and reactivity

Reactivity The product is stable and non-reactive under normal conditions of use, storage, and transport.

Chemical stability Material is stable under normal conditions.

Possibility of hazardous reactions  
No dangerous reaction is known under conditions of normal use.

<b>Conditions to avoid</b>	Contact with incompatible materials. Refractories containing crystalline silica may, after service, contain more or less crystalline silica. Care must be taken to avoid and/or control dust from demolition.
<b>Incompatible materials</b>	Phosphorus. Chlorine. Powerful Oxidizers. Incompatibility is based strictly upon potential theoretical reactions between chemicals and may not be specific to industrial application exposure. Contact your sales representative for clarification.
<b>Hazardous decomposition products</b>	No hazardous decomposition products are known.

## 11. Toxicological information

### Information on likely routes of exposure

<b>Inhalation</b>	Dust may irritate the respiratory system. Prolonged inhalation may be harmful.
<b>Skin contact</b>	Dust or powder may irritate the skin.
<b>Eye contact</b>	Dust may irritate the eyes.
<b>Ingestion</b>	Expected to be a low ingestion hazard.

### Symptoms related to the physical, chemical, and toxicological characteristics:

Dust may irritate the respiratory tract, skin, and eyes.  
Coughing.

### Information on toxicological effects

<b>Acute toxicity</b>	Not available.
<b>Skin corrosion/irritation</b>	Prolonged skin contact may cause temporary irritation.
<b>Serious eye damage/eye irritation</b>	Direct contact with eyes may cause temporary irritation.

### Respiratory or skin sensitization

<b>Respiratory sensitization</b>	Not a respiratory sensitizer.
<b>Skin sensitization</b>	This product is not expected to cause skin sensitization.
<b>Germ cell mutagenicity</b>	No data is available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

### Carcinogenicity

In 1997, IARC (the International Agency for Research on Cancer) concluded that crystalline silica inhaled from occupational sources can cause lung cancer in humans. However, in making the overall evaluation, IARC noted that "carcinogenicity was not detected in all industrial circumstances studied. Carcinogenicity may be dependent on inherent characteristics of the crystalline silica or external factors affecting its biological activity or distribution of its polymorphs." Occupational exposure to respirable dust and respirable crystalline silica should be monitored and controlled.

### IARC Monographs. Overall Evaluation of Carcinogenicity

Quartz (SiO<sub>2</sub>) (CAS 14808-60-7)      1 Carcinogenic to humans.

**US National Toxicology Program (NTP) Report on Carcinogens**  
 Quartz (SiO<sub>2</sub>) (CAS 14808-60-7) Known To Be Human Carcinogen.  
**US OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**  
 Not listed.

<b>Reproductive toxicity</b>	This product is not expected to cause reproductive or developmental effects.	
<b>Developmental effects</b>		
Quartz (SiO <sub>2</sub> )		0
<b>Developmental effects - EU category</b>		
Quartz (SiO <sub>2</sub> )		0
<b>Embryotoxicity</b>		
Quartz (SiO <sub>2</sub> )		0
<b>Reproductively</b>		
Quartz (SiO <sub>2</sub> )		0
<b>Specific target organ toxicity - single exposure</b>	Not classified.	
<b>Specific target organ toxicity - repeated exposure</b>	Not classified.	
<b>Aspiration hazard</b>	Not an aspiration hazard.	
<b>Chronic effects</b>	Prolonged inhalation may be harmful. Prolonged exposure may cause chronic effects.	

## 12. Ecological information

<b>Ecotoxicity</b>	The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.
<b>Persistence and degradability</b>	No data is available on the degradability of this product.
<b>Bio-accumulative potential</b>	No data available.
<b>Mobility in soil</b>	No data available.
<b>Other adverse effects</b>	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

## 13. Disposal considerations

<b>Disposal instructions</b>	This product, in its present state, when discarded or disposed of, is not hazardous waste according to Federal regulations (40 CFR 261.4 (b)(4)). Under RCRA, it is the responsibility of the user of the product to determine, at the time of disposal, whether the product meets RCRA criteria for hazardous waste.
<b>Hazardous waste code</b>	Not applicable.
<b>Waste from residues / unused products</b>	Not available.
<b>Contaminated packaging</b>	Not available.

## 14. Transport information



**DOT**

Not regulated as dangerous goods.

**IATA**

Not regulated as dangerous goods.

**IMDG**

Not regulated as dangerous goods.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

Not applicable.

## **15. Regulatory information**

**US federal regulations**

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. One or more components are not listed on TSCA. All chemical substances in this product are listed on the TSCA chemical substance inventory where required.

## **16. Other information, including date of preparation or last revision**

This information is supplied to be informative and to alert the user of the material. The ultimate compliance with federal, state, and/or local regulations concerning the use of this material, or compliance with respect to product liability, rests solely upon the purchaser thereof.

**Prepared by:** FRC Global

**Date:** October 2020

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**End of Safety Data Sheet**