



# EZ EST 20CR

## Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS 2024)  
Issue date: 9/28/2016 Revision date: 1/28/2026 Supersedes: 4/17/2023

### SECTION 1 Identification

#### 1.1. Product identifier

Product form : Mixture  
Product name : EZ EST 20CR  
CAS-No. : Mixture  
Product code : 4476

#### 1.2. Other means of identification

Other means of identification : Dry Additive for Gel Bonded Castable

#### 1.3. Recommended use of the chemical and restrictions on use

Use of the substance/mixture : Refractory  
Recommended use : Industrial use

#### 1.4. Supplier's details

RHI Magnesita  
425 South Salem Church Road  
York, PA, 17408  
United States  
T 717-792-3611  
Resco SDS.TDS@rhimagnesita.com - WWW.RescoProducts.com

#### 1.5. Emergency phone number

Emergency number : EMERGENCY ONLY (CHEMREC) USA & Canada 1-800-424-9300  
Outside USA & Canada +1 703-741-5970

### SECTION 2 Hazard Identification

#### 2.1. Classification of the substance or mixture

##### GHS US classification

Skin corrosion/irritation, Category 2	H315	Causes skin irritation.
Serious eye damage/eye irritation, Category 2B	H320	Causes eye irritation.
Carcinogenicity, Category 1A	H350	May cause cancer (Inhalation).
Full text of H statements : see section 16		

#### 2.2. Label elements

##### GHS US labeling

Hazard pictograms (GHS US)



Signal word (GHS US)

: Danger

Hazard statements (GHS US)

: H350 - May cause cancer (Inhalation).

: H315 - Causes skin irritation

: H320 - Causes eye irritation

Precautionary statements (GHS US)

: P202 - Do not handle until all safety precautions have been read and understood.

: P280 - Wear eye protection, Dust respirator, protective gloves.

: P260 - Do not breathe dust.

#### 2.3. Hazards associated with known or reasonably anticipated uses

No additional information available

#### 2.4. Hazards not otherwise classified

No additional information available

#### 2.5. Unknown acute toxicity

No additional information available

### SECTION 3 Composition/information on ingredients

#### 3.1. Substances

Not applicable

#### 3.2. Mixtures

Name	Product identifier	%	GHS US classification
aluminium oxide, non-fibrous	CAS-No.: 1344-28-1	≥ 80	Not classified
chromium(III) oxide	CAS-No.: 1308-38-9	10 – 30	Not classified
cristobalite	CAS-No.: 14464-46-1	0.1 – 0.5	Carc. 1A, H350

Full text of hazard classes and H-statements : see section 16

# EZ EST 20CR

## Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS 2024)

### SECTION 4 First aid measures

#### 4.1. Description of necessary first-aid measures

First-aid measures general	: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
First-aid measures after inhalation	: Allow affected person to breathe fresh air. Allow the victim to rest.
First-aid measures after skin contact	: Gently wash with plenty of soap and water.
First-aid measures after eye contact	: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
First-aid measures after ingestion	: Rinse mouth. Do not induce vomiting. Get medical advice/attention if you feel unwell.

#### 4.2. Most important symptoms/effects, acute and delayed

Potential Adverse human health effects and symptoms	: Danger of serious damage to health by prolonged exposure through inhalation.
Symptoms/effects after inhalation	: Danger of serious damage to health by prolonged exposure through inhalation. May cause cancer by inhalation.
Symptoms/effects after skin contact	: Causes skin irritation.
Symptoms/effects after eye contact	: Causes eye irritation.

#### 4.3. Indication of immediate medical attention and special treatment needed, if necessary

No additional information available

### SECTION 5: Fire-fighting measures

#### 5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media	: Use extinguishing media appropriate for surrounding fire.
Unsuitable extinguishing media	: In case of fire, all extinguishing media allowed.

#### 5.2. Specific hazards arising from the chemical

Fire hazard	: Not flammable.
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#### 5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions	: Fight fire with normal precautions from a reasonable distance.
Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection.

### SECTION 6 Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

##### For non-emergency personnel

Protective equipment	: [In case of inadequate ventilation] wear respiratory protection. Protective gloves. Safety glasses.
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##### For emergency responders

Protective equipment	: Equip cleanup crew with proper protection.
Environmental precautions	: Prevent entry to sewers and public waters.

#### 6.2. Methods and materials for containment and cleaning up

For containment	: Collect spillage.
Methods for cleaning up	: On land, sweep or shovel into suitable containers.

For further information refer to section 8: "Exposure controls/personal protection"

### SECTION 7 Handling and storage

#### 7.1. Precautions for safe handling

Precautions for safe handling	: Do not handle until all safety precautions have been read and understood. Avoid contact with skin and eyes. Do not breathe dust.
Hygiene measures	: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

#### 7.2. Conditions for safe storage, including incompatibilities

Storage conditions	: Store this product in a dry location where it can be protected from the elements.
Incompatible products	: Finely divided metals. Chromic oxide may react with alkali at high temperatures under oxidizing conditions.

### SECTION 8 Exposure controls/personal protection

#### 8.1. Control parameters

##### aluminium oxide, non-fibrous (1344-28-1)

##### USA - ACGIH - Occupational Exposure Limits

ACGIH® TLV® TWA	1 mg/m <sup>3</sup> respirable dust
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##### chromium(III) oxide (1308-38-9)

##### USA - ACGIH - Occupational Exposure Limits

ACGIH® TLV® TWA	0.003 mg/m <sup>3</sup> (Inhalable fraction)
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# EZ EST 20CR

## Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS 2024)

### cristobalite (14464-46-1)

#### USA - ACGIH - Occupational Exposure Limits

ACGIH® TLV® TWA 0.025 mg/m<sup>3</sup> respirable dust

#### USA - OSHA - Occupational Exposure Limits

OSHA PEL TWA 0.05 mg/m<sup>3</sup> respirable dust

## 8.2. Appropriate engineering controls

Appropriate engineering controls : Provide adequate ventilation to minimize dust concentrations.

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

### Personal protective equipment:

Avoid all unnecessary exposure.

#### Hand protection:

Wear protective gloves.

#### Eye protection:

Chemical goggles or safety glasses

#### Skin and body protection:

Wear suitable protective clothing

#### Respiratory protection:

Wear appropriate mask

## SECTION 9 Physical and chemical properties

### 9.1. Basic physical and chemical properties

Physical state	: Solid
Appearance	: Granular mixture.
Color	: Green
Odor	: odorless
Odor threshold	: No data available
pH	: No data available
Melting point	: > 2000 °F
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Flammability (solid, gas)	: Not flammable.
Vapor pressure	: No data available
Relative vapor density at 20°C	: No data available
Relative density	: No data available
Solubility	: Insoluble.
Partition coefficient n-octanol/water (Log Pow)	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Explosion limits	: No data available
Particle characteristics	: No data available

### 9.2. Data relevant with regard to physical hazard classes (supplemental)

No additional information available

## SECTION 10 Stability and reactivity

### 10.1. Reactivity

Fire conditions may produce small amounts of hexavalent chromium and other oxidation products.

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

No additional information available

### 10.4. Conditions to avoid

No additional information available

### 10.5. Incompatible materials

Strong acids. Chromic oxide may react with alkali at high temperatures under oxidizing conditions.

# EZ EST 20CR

## Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS 2024)

### 10.6. Hazardous decomposition products

No additional information available

## SECTION 11 Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified  
Acute toxicity (dermal) : Not classified  
Acute toxicity (inhalation) : Not classified

#### aluminium oxide, non-fibrous (1344-28-1)

LD50 oral rat	> 15900 mg/kg body weight (Equivalent or similar to OECD 401, Rat, Male / female, Experimental value, Oral, 14 day(s))
LC50 Inhalation - Rat	> 2.3 mg/l air (Equivalent or similar to OECD 403, 4 h, Rat, Male / female, Experimental value, Inhalation (aerosol), 14 day(s))

#### chromium(III) oxide (1308-38-9)

LD50 oral rat	> 5000 mg/kg body weight (Equivalent or similar to OECD 401, Rat, Male / female, Experimental value, Oral, 14 day(s))
LC50 Inhalation - Rat	> 5.41 mg/l air (OECD 403: Acute Inhalation Toxicity, 4 h, Rat, Male / female, Experimental value, Inhalation (dust), 14 day(s))

Skin corrosion/irritation : Causes skin irritation.

#### aluminium oxide, non-fibrous (1344-28-1)

pH	9 – 10.5 (aqueous suspension, 33 %)
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#### chromium(III) oxide (1308-38-9)

pH	No data available in the literature
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#### cristobalite (14464-46-1)

pH	6 – 7
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Serious eye damage/irritation : Causes eye irritation.

#### aluminium oxide, non-fibrous (1344-28-1)

pH	9 – 10.5 (aqueous suspension, 33 %)
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#### chromium(III) oxide (1308-38-9)

pH	No data available in the literature
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#### cristobalite (14464-46-1)

pH	6 – 7
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Respiratory or skin sensitization : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : May cause cancer (Inhalation).

Reproductive toxicity : Not classified

STOT-single exposure : Not classified

STOT-repeated exposure : Not classified

Aspiration hazard : Not classified

#### aluminium oxide, non-fibrous (1344-28-1)

Viscosity, kinematic	Not applicable (solid)
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#### chromium(III) oxide (1308-38-9)

Viscosity, kinematic	Not applicable (solid)
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Potential Adverse human health effects and symptoms : Danger of serious damage to health by prolonged exposure through inhalation.

Symptoms/effects after inhalation : Danger of serious damage to health by prolonged exposure through inhalation. May cause cancer by inhalation.

Symptoms/effects after skin contact : Causes skin irritation.

Symptoms/effects after eye contact : Causes eye irritation.

# EZ EST 20CR

## Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS 2024)

### SECTION 12 Ecological information

#### 12.1. Ecotoxicity

Hazardous to the aquatic environment, short-term (acute) : Not classified

Hazardous to the aquatic environment, long-term (chronic) : Not classified

#### aluminium oxide, non-fibrous (1344-28-1)

LC50 - Fish [1]	> 100 mg/l (96 h, Salmo trutta, Literature study)
EC50 - Crustacea [1]	> 100 mg/l (48 h, Daphnia magna, Literature study)

#### chromium(III) oxide (1308-38-9)

LC50 - Fish [1]	> 10000 mg/l (ISO 7346-1, 96 h, Danio rerio, Static system, Fresh water, Experimental value, GLP)
EC50 - Crustacea [1]	14 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, Locomotor effect)

#### 12.2. Persistence and degradability

#### EZ EST 20CR (Mixture)

Persistence and degradability	Not applicable
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#### aluminium oxide, non-fibrous (1344-28-1)

Persistence and degradability	Not applicable.
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable

#### chromium(III) oxide (1308-38-9)

Persistence and degradability	Biodegradability: not applicable.
Chemical oxygen demand (COD)	Not applicable (inorganic)
ThOD	Not applicable (inorganic)

#### cristobalite (14464-46-1)

Persistence and degradability	Mineral, Not applicable.
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable

#### 12.3. Bioaccumulative potential

Bioaccumulative potential	No data available.
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#### chromium(III) oxide (1308-38-9)

Bioaccumulative potential	Not bioaccumulative.
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#### cristobalite (14464-46-1)

Bioaccumulative potential	No data available.
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#### 12.4. Mobility in soil

aluminium oxide, non-fibrous (1344-28-1)	
Surface tension	Not applicable (water solubility < 1 mg/l)
Ecology - soil	No data available.

# EZ EST 20CR

## Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS 2024)

### chromium(III) oxide (1308-38-9)

Surface tension	No data available in the literature
Ecology - soil	Adsorbs into the soil.

### cristobalite (14464-46-1)

Ecology - soil	No data available.
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### 12.5. Other adverse effects

Ozone	: Not classified
Fluorinated greenhouse gases	: No

## SECTION 13 Disposal considerations

Product/Packaging disposal recommendations	: Dispose in a safe manner in accordance with local/national regulations.
Additional information	: Chromite (Cr <sup>3+</sup> ) may in normal use be converted chemically to a chromate (Cr <sup>6+</sup> ). Hexavalent chromium (Cr <sup>6+</sup> ) is considered a hazardous material.

## SECTION 14 Transport information

In accordance with DOT / TDG / IMDG / IATA

### Department of Transportation (DOT)

In accordance with DOT

Not regulated

### Transportation of Dangerous Goods

Not regulated

### Transport by sea

Not regulated

### Air transport

Not regulated

## SECTION 15 Regulatory information

### 15.1. Federal regulations

#### EZ EST 20CR (Mixture)

Note	This information must be included in all SDS's that are copied and distributed for this material.
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All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

### aluminium oxide, non-fibrous (1344-28-1)

Not subject to reporting requirements of the United States SARA Section 313

Note	Note: The section 313 chemical list contains "CAS # 1344-28-1 Aluminum Oxide (Fibrous forms)"; the Aluminum oxide contained in this product is non-fibrous, and thus is not a section 313 material. Only manufacturing, processing, or otherwise use of aluminum oxide in the fibrous form triggers reporting.
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### chromium(III) oxide (1308-38-9)

Subject to reporting requirements of United States SARA Section 313

### 15.2. International regulations

#### CANADA

### aluminium oxide, non-fibrous (1344-28-1)

Listed on the Canadian DSL (Domestic Substances List)

### chromium(III) oxide (1308-38-9)

Listed on the Canadian DSL (Domestic Substances List)

### cristobalite (14464-46-1)

Listed on the Canadian DSL (Domestic Substances List)

#### EU-Regulations

No additional information available

# EZ EST 20CR

## Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS 2024)

### National regulations

No additional information available

### 15.3. State regulations

#### EZ EST 20CR (Mixture)

U.S. - California - Proposition 65 - Other information	This product contains chromite (Cr <sup>+</sup> +3) which may in normal use, be converted chemically to a chromate (Cr <sup>+</sup> +6) hexavalent chrome, a chemical known to the State of California to cause cancer. This product contains crystalline silica, a chemical known to the state of California to cause cancer. For more information go to <a href="http://WWW.P65Warnings.ca.gov">WWW.P65Warnings.ca.gov</a>
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#### cristobalite (14464-46-1)

U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)	Maximum allowable dose level (MADL)
Yes	No	No	No		

Component	State or local regulations
aluminium oxide, non-fibrous(1344-28-1)	U.S. - Massachusetts - Right To Know List; U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - Pennsylvania - RTK (Right to Know) List
chromium(III) oxide(1308-38-9)	U.S. - Massachusetts - Right To Know List; U.S. - New Jersey - Right to Know Hazardous Substance List
cristobalite(14464-46-1)	U.S. - Massachusetts - Right To Know List; U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - Pennsylvania - RTK (Right to Know) List

### SECTION 16 Other information

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS 2024)

Revision date : 1/28/2026

Issue date : 9/28/2016

Other information : Report language name. English. In the event of any conflict between English and other language versions, the English version shall prevail.

### Full text of hazard classes and H-statements

H315	Causes skin irritation
H320	Causes eye irritation
H350	May cause cancer.

Safety Data Sheet (SDS), USA

This information and recommendations set forth herein are taken from sources believed to be accurate as of the date herein, however, RHI Magnesita makes no warranty with respect to the accuracy of the information or the suitability of the recommendations, and assumes no liability to any user thereof.