

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

Product form : Mixture  
 Product name : Greenfree  
 CAS No : Mixture  
 Product code : 5489 = Mix3807  
 Other means of identification : Magnesita-Alunina Spinel Brick

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Refractory

#### 1.3. Details of the supplier of the safety data sheet

Resco Products, Inc.  
 One Robinson Plaza, Suite 300  
 6600 Steubenville Pike  
 Pittsburgh, PA 15205 - United States  
 412-494-4491  
[www.rescoproducts.com](http://www.rescoproducts.com)

#### 1.4. Emergency telephone number

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

### SECTION 2: Hazards identification

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

##### GHS-US classification

Not classified

#### 2.2. Label elements

##### GHS-US labelling

Hazard pictograms (GHS-US) :



GHS07

Signal word (GHS-US) : Warning  
 Hazard statements (GHS-US) : Dust from sawing or tear out may irritate eye.  
 H315 - Causes skin irritation  
 H335 - May cause respiratory irritation from dust in sawing or tear out operations.  
 Precautionary statements (GHS-US) : P280 - Wear Safety shoes, protective gloves, eye protection

#### 2.3. Other hazards

No additional information available

#### 2.4. Unknown acute toxicity (GHS-US)

Not applicable

### SECTION 3: Composition/information on ingredients

#### 3.1. Substance

Not applicable

#### 3.2. Mixture

Name	Product identifier	%	GHS-US classification
Magnesium Oxide	(CAS No) 1309-48-4	75 - 95	Not classified
aluminium oxide, non-fibrous	(CAS No) 1344-28-1	10 - 20	Not classified

Full text of H-phrases: see section 16

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

First-aid measures general : Never give anything by mouth to an unconscious person.  
 First-aid measures after inhalation : Allow victim to breathe fresh air.  
 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.

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

Symptoms/injuries after inhalation : May cause respiratory irritation.  
 Symptoms/injuries after skin contact : Dry skin. Irritation.  
 Symptoms/injuries after eye contact : Dust from sawing or tear out may irritate eye.  
 Symptoms/injuries after ingestion : No data available.

#### 4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

Suitable extinguishing media : Use extinguishing media appropriate for surrounding fire.  
 Unsuitable extinguishing media : No unsuitable extinguishing media known.

#### 5.2. Special hazards arising from the substance or mixture

Fire hazard : Non-flammable.  
 Reactivity : None known.

#### 5.3. Advice for firefighters

Firefighting instructions : No specific fire-fighting instructions required.  
 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

##### 6.1.1. For non-emergency personnel

Protective equipment : Safety shoes. Protective gloves. Safety glasses.  
 Emergency procedures : Avoid contact with skin. Avoid contact with eyes.

##### 6.1.2. For emergency responders

Protective equipment : Use personal protective equipment as required.

#### 6.2. Environmental precautions

No additional information available

#### 6.3. Methods and material for containment and cleaning up

For containment : Collect spillage.  
 Methods for cleaning up : Collect spillage.

#### 6.4. Reference to other sections

No additional information available

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

Precautions for safe handling : Wear Safety shoes, Gloves.  
 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 any incompatibilities

Storage conditions : Store this product in a dry location where it can be protected from the elements.  
 Incompatible products : Strong acids.

#### 7.3. Specific end use(s)

No additional information available

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

Greenfree (Mixture)		
ACGIH	Not applicable	
OSHA	Not applicable	
aluminium oxide, non-fibrous (1344-28-1)		
ACGIH	ACGIH TWA (mg/m <sup>3</sup> )	1 mg/m <sup>3</sup>
OSHA	Not applicable	
Magnesium Oxide (1309-48-4)		
ACGIH	ACGIH TWA (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup>
OSHA	Not applicable	

#### 8.2. Exposure controls

Hand protection : Wear protective gloves.  
 Eye protection : Safety glasses.  
 Respiratory protection : Where exposure through inhalation may occur from use, respiratory protection equipment is recommended.

### SECTION 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

Physical state : Solid  
 Appearance : Solid in various shapes.  
 Colour : medium;brown  
 Odour : None  
 Odour threshold : No data available  
 pH : No data available  
 Relative evaporation rate (butylacetate=1) : No data available

# Greenfree

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Melting point	: > 2500 °F
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: ≈ 2.9
Solubility	: Water: Insoluble
Log Pow	: No data available
Log Kow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

None known.

### 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

No additional information available

### 10.6. Hazardous decomposition products

No additional information available

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity : Not classified

<b>aluminium oxide, non-fibrous (1344-28-1)</b>	
LD50 oral rat	> 10000 mg/kg (Rat; Experimental value)
<b>Magnesium Oxide (1309-48-4)</b>	
LD50 oral rat	> 5000 mg/kg (Rat; Literature study)
LD50 dermal rabbit	> 2000 mg/kg bodyweight (Rabbit; Literature study)

Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
Specific target organ toxicity (single exposure)	: Not classified
Specific target organ toxicity (repeated exposure)	: Not classified
Aspiration hazard	: Not classified
Symptoms/injuries after inhalation	: May cause respiratory irritation.
Symptoms/injuries after skin contact	: Dry skin. Irritation.
Symptoms/injuries after eye contact	: Dust from sawing or tear out may irritate eye.
Symptoms/injuries after ingestion	: No data available.

## SECTION 12: Ecological information

### 12.1. Toxicity

<b>aluminium oxide, non-fibrous (1344-28-1)</b>	
Threshold limit algae 1	> 100 mg/l (72 h; Selenastrum capricornutum; GLP)

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### 12.2. Persistence and degradability

<b>aluminium oxide, non-fibrous (1344-28-1)</b>	
Persistence and degradability	Biodegradability: not applicable.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable

  

<b>Magnesium Oxide (1309-48-4)</b>	
Persistence and degradability	Biodegradability: not applicable. No (test)data on mobility of the substance available.
ThOD	Not applicable (inorganic)

### 12.3. Bioaccumulative potential

<b>aluminium oxide, non-fibrous (1344-28-1)</b>	
Bioaccumulative potential	No bioaccumulation data available.

  

<b>Magnesium Oxide (1309-48-4)</b>	
Bioaccumulative potential	Bioaccumulation: not applicable.

### 12.4. Mobility in soil

No additional information available

### 12.5. Other adverse effects

Effect on ozone layer :  
Effect on the global warming : No known ecological damage caused by this product.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.

## SECTION 14: Transport information

In accordance with DOT  
Not regulated for transport

### Additional information

Other information : No supplementary information available.

### ADR

No additional information available

### Transport by sea

No additional information available

### Air transport

No additional information available

## SECTION 15: Regulatory information

### 15.1. US Federal regulations

No additional information available

### 15.2. International regulations

#### CANADA

<b>Greenfree (Mixture)</b>	
WHMIS Classification	D2A

### EU-Regulations

No additional information available

**Classification according to Regulation (EC) No. 1272/2008 [CLP]**

**Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]**

Not classified

### 15.2.2. National regulations

### 15.3. US State regulations

## SECTION 16: Other information

SDS US (GHS HazCom 2012)

*This information and recommendations set forth herein are taken from sources believed to be accurate as of the date herein, however, Resco Products, Inc. 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.*