



# Greenfree KF

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

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### SECTION 1: Identification

#### 1.1. Identification

Product form : Mixture  
Product name : Greenfree KF  
CAS No : Mixture  
Product code : 5491  
Other means of identification : Magnesia - Alumina Spinel Brick

#### 1.2. Recommended use and restrictions on use

Use of the substance/mixture : Refractory

#### 1.3. Supplier

Resco Products, Inc.  
One Robinson Plaza, Suite 300  
6600 Steubenville Pike  
Pittsburgh, PA 15205 - United States  
412-494-4491

[SDS@RescoProducts.com](mailto:SDS@RescoProducts.com) - [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: Hazard(s) identification

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

##### GHS-US classification

Not classified

#### 2.2. GHS Label elements, including precautionary statements

##### GHS-US labeling

Hazard pictograms (GHS-US) :



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 which do not result in classification

No additional information available

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

Not applicable

### SECTION 3: Composition/Information on ingredients

#### 3.1. Substances

Not applicable

#### 3.2. Mixtures

| 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 | 5 - 10  | Not classified        |

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

### SECTION 4: First-aid measures

#### 4.1. Description of first aid measures

First-aid measures after inhalation : Dust when sawing or tear out. 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 : Do NOT induce vomiting. Get medical advice/attention if you feel unwell.

#### 4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects after inhalation : Coughing.

#### 4.3. Immediate medical attention and special treatment, 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 : No unsuitable extinguishing media known.

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

Fire hazard : Non-flammable.

#### 5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions : No specific fire-fighting instructions required.

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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 : Do not attempt to take action without suitable protective equipment.

#### 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 : Carefully collect the spill/leftovers.

#### 6.4. Reference to other sections

No additional information available

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

Hygiene measures : Do not eat, drink or smoke when using this product. Wash skin thoroughly with mild soap and water.

#### 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.

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

##### Magnesium Oxide (1309-48-4)

|       |                                |  |
|-------|--------------------------------|--|
| ACGIH | ACGIH TWA (mg/m <sup>3</sup> ) | 10 mg/m <sup>3</sup> (Magnesium oxide; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value; Inhalable fraction) |
|-------|--------------------------------|--|

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

Not applicable

#### 8.2. Appropriate engineering controls

No additional information available

#### 8.3. Individual protection measures/Personal protective equipment

No additional information available

### SECTION 9: Physical and chemical properties

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

Physical state : Solid  
Appearance : Solid in various shapes.  
Color : medium brown  
Odor : None  
Odor threshold : No data available  
pH : No data available  
Melting point : > 2500 °F  
Freezing point : No data available  
Boiling point : No data available  
Flash point : No data available  
Relative evaporation rate (butyl acetate=1) : No data available  
Flammability (solid, gas) : Not flammable.  
Vapor pressure : No data available  
Relative vapor density at 20 °C : No data available  
Relative density : ≈ 2.8  
Solubility : Insoluble in water.  
Log Pow : No data available  
Auto-ignition temperature : No data available  
Decomposition temperature : No data available  
Viscosity, kinematic : No data available  
Viscosity, dynamic : No data available  
Explosion limits : No data available  
Explosive properties : No data available  
Oxidizing properties : No data available

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### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

No additional information available

### 10.2. Chemical stability

No additional information available

### 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

#### Magnesium Oxide (1309-48-4)

|                    |   |
|--------------------|---|
| LD50 oral rat      | > 5000 mg/kg (Rat; Literature study)                |
| LD50 dermal rabbit | > 2000 mg/kg body weight (Rabbit; Literature study) |

#### 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) |
| LC50 inhalation rat (mg/l) | 7.6 mg/l air (Equivalent or similar to OECD 403, 1 h, Rat, Male, Experimental value)                |

|  |                  |
|--|------------------|
| Skin corrosion/irritation                          | : Not classified |
| Serious eye damage/irritation                      | : Not classified |
| Respiratory or skin sensitization                  | : 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/effects after inhalation                  | : Coughing.      |

## SECTION 12: Ecological information

### 12.1. Toxicity

|                                    |                              |
|------------------------------------|------------------------------|
| <b>Magnesium Oxide (1309-48-4)</b> |                              |
| EC50 Daphnia 1                     | 500-665,TLM; 96 h; Mysidacea |

### 12.2. Persistence and degradability

|                                    |   |
|------------------------------------|---|
| <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)  |

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

### 12.3. Bioaccumulative potential

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

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

### 12.4. Mobility in soil

|   |  |
|---|--|
| <b>aluminium oxide, non-fibrous (1344-28-1)</b> |  |
| Ecology - soil                                  | No (test) data on mobility of the substance available. |

### 12.5. Other adverse effects

No additional information available

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### SECTION 13: Disposal considerations

#### 13.1. Disposal methods

No additional information available

### SECTION 14: Transport information

#### Department of Transportation (DOT)

In accordance with DOT

Not regulated

#### TDG

Not regulated

#### Transport by sea

Not regulated

#### Air transport

Not regulated

### SECTION 15: Regulatory information

#### 15.1. US Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

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

Subject to reporting requirements of United States SARA Section 313

#### 15.2. International regulations

##### CANADA

No additional information available

##### EU-Regulations

No additional information available

##### National regulations

No additional information available

#### 15.3. US State regulations

##### agnesium Oxide (1309-48-4)

U.S. - New Jersey - Right to Know Hazardous Substance List

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

U.S. - New Jersey - Right to Know Hazardous Substance List

### SECTION 16: Other information

Revision date : 12/20/2017

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

SDS US (GHS HazCom 2012)

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