



Greenfree KF

Safety Data Sheet

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

Date of issue: 05/01/2015

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

1.1. Product identifier

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

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 | 5 - 10 | 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 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, both acute and delayed

Symptoms/injuries after inhalation : Coughing.

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.

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Unsuitable extinguishing media : No unsuitable extinguishing media known.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Non-flammable.

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 : 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.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

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

8.2. Exposure controls

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.

Colour : medium;brown

Odour : None

Odour threshold : No data available

pH : No data available

Relative evaporation rate (butylacetate=1) : No data available

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

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| | |
|----------------------------------|---------------------|
| Vapour pressure | : No data available |
| Relative vapour density at 20 °C | : No data available |
| Relative density | : ≈ 2.8 |
| 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

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 bodyweight (Rabbit; Literature study)

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

LD50 oral rat > 10000 mg/kg (Rat; Experimental value)

| | |
|--|------------------|
| 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 | : Coughing. |

SECTION 12: Ecological information

12.1. Toxicity

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

Threshold limit algae 1 > 100 mg/l (72 h; Selenastrum capricornutum; GLP)

12.2. Persistence and degradability

Magnesium Oxide (1309-48-4)

Persistence and degradability Biodegradability: not applicable. No (test)data on mobility of the substance available.

ThOD Not applicable (inorganic)

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

Persistence and degradability Biodegradability: not applicable.

Biochemical oxygen demand (BOD) Not applicable

Chemical oxygen demand (COD) Not applicable

ThOD Not applicable

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| | |
|---|----------------|
| aluminium oxide, non-fibrous (1344-28-1) | |
| BOD (% of ThOD) | Not applicable |

12.3. Bioaccumulative potential

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

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

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

No additional information available

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

No additional information available

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

SECTION 16: Other information

SDS US (GHS HazCom 2012)

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