



Greenfree

Safety Data Sheet

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

Date of issue: 12/14/2017

Revision date: 12/14/2017

Supersedes: 03/15/2015

SECTION 1: Identification

1.1. Identification

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

Skin corrosion/irritation H315 Causes skin irritation
Category 2
Specific target organ toxicity (single exposure) H335 May cause respiratory irritation from dust in sawing or tear out operations.
Category 3

Full text of H statements : see section 16

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	10 - 20	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 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 (acute and delayed)

Symptoms/effects after inhalation : May cause respiratory irritation.
Symptoms/effects after skin contact : Not irritating. Irritation.
Symptoms/effects after eye contact : Dust from sawing or tear out may irritate eye.
Symptoms/effects after ingestion : No data available.

Greenfree

Safety Data Sheet

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

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.
Reactivity : None known.

5.3. Special protective equipment and precautions for fire-fighters

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.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

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

Not applicable

Magnesium Oxide (1309-48-4)

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

8.2. Appropriate engineering controls

No additional information available

8.3. Individual protection measures/Personal protective equipment

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.
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

Greenfree

Safety Data Sheet

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

Flammability (solid, gas)	: Not flammable.
Vapor pressure	: No data available
Relative vapor density at 20 °C	: No data available
Relative density	: ≈ 2.9
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

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

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)

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)

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	: May cause respiratory irritation.
Symptoms/effects after skin contact	: Not irritating. Irritation.
Symptoms/effects after eye contact	: Dust from sawing or tear out may irritate eye.
Symptoms/effects after ingestion	: No data available.

SECTION 12: Ecological information

12.1. Toxicity

Magnesium Oxide (1309-48-4)

EC50 Daphnia 1	500-665, TLM; 96 h; Mysidacea
----------------	-------------------------------

12.2. Persistence and degradability

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

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

Greenfree

Safety Data Sheet

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

aluminium oxide, non-fibrous (1344-28-1)	
ThOD	Not applicable (inorganic)
Magnesium Oxide (1309-48-4)	
Persistence and degradability	Biodegradability: not applicable. No (test) data on mobility of the substance available.
ThOD	Not applicable (inorganic)

12.3. Bioaccumulative potential

aluminium oxide, non-fibrous (1344-28-1)	
Bioaccumulative potential	No bioaccumulation data available.
Magnesium Oxide (1309-48-4)	
Bioaccumulative potential	Bioaccumulation: not applicable.

12.4. Mobility in soil

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

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Disposal methods

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

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

aluminium oxide, non-fibrous (1344-28-1)
U.S. - New Jersey - Right to Know Hazardous Substance List
Magnesium Oxide (1309-48-4)
U.S. - New Jersey - Right to Know Hazardous Substance List

SECTION 16: Other information

Revision date

12/14/2017

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 H-phrases:

H315	Causes skin irritation
H335	May cause respiratory irritation

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.