Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name MAGRABAR® MD-3500
Material No. 7727
Historic Material No. F0607

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

Relevant identified uses Anti-foaming agent (defoamer)
Uses advised against Consumer use

1.3. Details of the supplier of the safety data sheet

Manufacturer MUNZING NORTH AMERICA – MAGRABAR LLC
6100 Madison Court
Morton Grove, IL 60053-3216
United States
Email: info@magrabar.com
Telephone: 1-847-965-7550

Supplier Münzing Chemie GmbH
Münzingstrasse 2
74232 Abstatt
Germany
Email: info@munzing.com
Phone: +49 (0) 7131/987-0

Emergency Telephone

Emergency telephone CHEMTREC: +1 703 741 5970
2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]
This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [GHS]

2.2. Label Elements
This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [GHS]

2.3. Other hazards
No information available.

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures

This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [GHS]
Full text of H- and EUH-phrases: see section 16

Section 4: FIRST AID MEASURES

4.1. Description of first aid measures

Eye Contact  Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.
Skin Contact  Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.
Inhalation  Move victim to fresh air.
Ingestion  Do NOT induce vomiting. Clean mouth with water and drink afterwards plenty of water.
Self-Protection of the First Aider  Use personal protection equipment.

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

Most important symptoms and effects  No information available.

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

Notes to Physician  Treat symptomatically.

Section 5: FIRE FIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media  Carbon dioxide (CO2). Dry chemical. Alcohol resistant foam.

Unsuitable Extinguishing Media  No information available.

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products  Oxides of sulfur. Carbon monoxide. Carbon dioxide (CO2). Flammable/toxic gases may accumulate in tanks and hopper cars.
5.3. Advice for firefighters

Advice for fire-fighters
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

Section 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions
Use personal protection equipment. Avoid contact with skin, eyes or clothing.

Protective precautions
Use personal protection equipment.

6.2. Environmental precautions

Environmental precautions
Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for Containment
Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

Methods for Clean-Up
Take up mechanically, placing in appropriate containers for disposal.

6.4. Reference to other sections

Reference to other sections
See Sections 5 & 7 for additional information.

Section 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Handling
Avoid dust formation. Fine dust dispersed in air may ignite. Remove all sources of ignition. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces. Dry powders can build static electricity charges resulting from the friction of transfer and mixing operations. Provide adequate precautions, such as electrical grounding and bonding, or inert atmospheres. Take precautionary measures against static discharges.

Handle in accordance with good industrial hygiene and safety practice. Do not breathe dusts or mists.

Refer to “NFPA 654”, Standard for the Prevention of Fire and Dust Explosions from the Manufacturing, Processing, and Handling of Combustible Particulate Solids, for safe handling recommendations.

General Hygiene Considerations
Handle in accordance with good industrial hygiene and safety practice.

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions
Keep container tightly closed in a dry and well-ventilated place. Keep in properly labeled containers. Keep away from open flames, hot surfaces and sources of ignition.

7.3. Specific end use(s)

Specific Uses
No information available.

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION
8.1. Control parameters

Exposure limits
This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Derived No Effect Level (DNEL) No information available.

Predicted No Effect Concentration (PNEC) No information available.

8.2. Exposure controls

Engineering Controls
Ensure adequate ventilation, especially in confined areas.

Personal protective equipment

Eye/Face Protection
Tight sealing safety goggles.

Skin protection
Wear suitable protective clothing and gloves. Wear protective nitrile rubber gloves. Glove thickness. > 0.4 mm. Ensure that the breakthrough time of the glove material is not exceeded. Refer to glove supplier for information on breakthrough time for specific gloves.

Respiratory protection
In case of mist, spray or aerosol exposure wear suitable personal respiratory protection and protective suit.

Environmental exposure controls No information available.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
<th>Remarks/ Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical State</td>
<td>Powder</td>
<td></td>
</tr>
<tr>
<td>Appearance</td>
<td>White</td>
<td></td>
</tr>
<tr>
<td>Odor</td>
<td>Mild Organic</td>
<td></td>
</tr>
<tr>
<td>Odor threshold</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>pH</td>
<td>No information available</td>
<td>No information available</td>
</tr>
<tr>
<td>Melting point</td>
<td>No information available</td>
<td>No information available</td>
</tr>
<tr>
<td>Boiling point</td>
<td>No information available</td>
<td>No information available</td>
</tr>
<tr>
<td>Flash Point</td>
<td>No information available</td>
<td>No information available</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>No information available</td>
<td>No information available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No information available</td>
<td>No information available</td>
</tr>
<tr>
<td>Flammability Limit in Air</td>
<td>No information available</td>
<td>No information available</td>
</tr>
<tr>
<td>Upper flammability limit</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Lower flammability limit</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>&lt; 0.1 mmHg</td>
<td>No information available</td>
</tr>
<tr>
<td>Vapor density</td>
<td>No information available</td>
<td>No information available</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>No information available</td>
<td>No information available</td>
</tr>
<tr>
<td>Water Solubility</td>
<td>Dispersible</td>
<td>No information available</td>
</tr>
<tr>
<td>Solubility in other solvents</td>
<td>No information available</td>
<td>No information available</td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water</td>
<td>No information available</td>
<td>No information available</td>
</tr>
<tr>
<td>Autoignition temperature</td>
<td>No information available</td>
<td>No information available</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No information available</td>
<td>No information available</td>
</tr>
<tr>
<td>Viscosity</td>
<td>No information available</td>
<td>No information available</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>MAY FORM EXPLOSIVE DUST-AIR MIXTURE</td>
<td></td>
</tr>
<tr>
<td>Oxidizing properties</td>
<td>No information available</td>
<td></td>
</tr>
</tbody>
</table>

Section 10: STABILITY AND REACTIVITY
10.1. Reactivity
Reactivity Stable under normal conditions.

10.2. Chemical stability
Chemical Stability Stable under normal conditions.

10.3. Possibility of hazardous reactions
Possibility of Hazardous Reactions None under normal processing.
Hazardous Polymerization Hazardous polymerization does not occur.

10.4. Conditions to avoid
Conditions to Avoid Heat, flames and sparks.

10.5. Incompatible materials
Incompatible Materials Strong oxidizing agents.

Hazardous decomposition products
Hazardous decomposition products Thermal decomposition can lead to release of irritating and toxic gases and vapors.

Section 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Acute Toxicity
Product Information

<table>
<thead>
<tr>
<th>Effect</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eyes</td>
<td>Contact with eyes may cause irritation. Avoid contact with eyes.</td>
</tr>
<tr>
<td>Skin</td>
<td>Substance may cause slight skin irritation. Avoid contact with skin.</td>
</tr>
<tr>
<td>Inhalation</td>
<td>Health injuries are not known or expected under normal use.</td>
</tr>
<tr>
<td>Ingestion</td>
<td>Health injuries are not known or expected under normal use.</td>
</tr>
<tr>
<td>Unknown acute toxicity</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>ATEmix (oral)</td>
<td>No data available</td>
</tr>
<tr>
<td>ATEmix (dermal)</td>
<td>No data available</td>
</tr>
<tr>
<td>ATEmix (inhalation-dust/mist)</td>
<td>No data available</td>
</tr>
<tr>
<td>Skin Corrosion/Irritation</td>
<td>No information available.</td>
</tr>
<tr>
<td>Eye damage/Irritation</td>
<td>No information available.</td>
</tr>
<tr>
<td>Sensitization</td>
<td>No information available.</td>
</tr>
<tr>
<td>Mutagenic effects</td>
<td>No information available.</td>
</tr>
<tr>
<td>Reproductive Effects</td>
<td>No information available.</td>
</tr>
<tr>
<td>STOT - single exposure</td>
<td>No information available.</td>
</tr>
</tbody>
</table>
STOT - repeated exposure  No information available.
Aspiration Hazard  No information available.
Carcinogenic effects  No information available.

Section 12: ECOLOGICAL INFORMATION

12.1. Toxicity
Ecotoxicity  Information given is based on data on the components and the toxicology of similar products.

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Algae</th>
<th>Fish</th>
<th>Daphnia magna</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrophobic silica</td>
<td>-</td>
<td>LC50: &gt;10000 mg/l, 96h</td>
<td>EC50: &gt;10000 mg/l, 24h</td>
</tr>
</tbody>
</table>

Unknown Aquatic Toxicity  Not applicable.

Persistence and degradability
Persistence and degradability  No information available.

12.3. Bioaccumulative potential
Bioaccumulation/Accumulation  No information available.

12.4. Mobility in soil
Mobility in Environmental Media  No information available.

12.5. Results of PBT and vPvB assessment
PBT and vPvB assessment  Not applicable.

12.6. Other adverse effects
Other adverse effects  No information available.

Section 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods
Waste from residues/unused products  Contain and dispose of waste according to local regulations.
Contaminated packaging  Empty remaining contents.
Waste codes / waste designations according to EWC / AVV  Not applicable.

Section 14: TRANSPORT INFORMATION

ADR/RID  Not regulated
IMDG/IMO  Not regulated
IATA  Not regulated
15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

International Inventories

US TSCA  Complies
Australia (AICS)  Complies
Canada (DSL)  Complies
China (IECS)  Complies
Europe (EINECS/ELINCS/NLP)  Complies
Japan (ENCS)  Complies
South Korea (KECL)  Complies
Philippines (PICCS)  Complies
New Zealand  Complies
Taiwan (TCSI)  Complies

Legend

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances

Germany

WGK Classification (AwSV)  Water endangering class = 1 (self estimation)

European Union

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work

Authorizations and/or restrictions on use:
This product does not contain substances subject to authorization (Regulation (EC) No. 1907/2006 (REACH), Annex XIV). This product does not contain substances subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII).

Persistent Organic Pollutants
Not applicable

Ozone-depleting substances (ODS) regulation (EC) 1005/2009
Not applicable

15.2. Chemical safety assessment

No information available

Section 16: OTHER INFORMATION

Key or legend to abbreviations and acronyms used in the safety data sheet

Full text of H-Statements referred to under section 3
No information available

Legend

SVHC: Substances of Very High Concern for Authorization:

TWA - TWA (time-weighted average)
STEL - STEL (Short Term Exposure Limit)
Ceiling - Maximum limit value
* - Skin designation

**Classification procedure**

<table>
<thead>
<tr>
<th>Issue Date:</th>
<th>2015-08-19</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revision Date:</td>
<td>2019-07-09</td>
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<tr>
<td>Reason for revision</td>
<td>SDS sections updated, 15.</td>
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</table>

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet