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

1.1. Product identifier

Product name: MAGRABAR® PD-702
Material No.: 7625
Historic Material No.: PD702

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 Äbstatt
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]
EUH210 - Safety data sheet available on request

2.3. Other hazards
No information available.

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>EC No.</th>
<th>CAS No</th>
<th>Weight-%</th>
<th>Classification according to Regulation (EC) No. 1272/2008 [CLP]</th>
<th>REACH No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Synthetic Amorphous Silica</td>
<td>Listed</td>
<td>-</td>
<td>3 - &lt;5</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Synthetic Amorphous Silica</td>
<td>Listed</td>
<td>-</td>
<td>1 - &lt;3</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Full text of H- and EUH-phrases: see section 16

Substances for which there are Community workplace exposure limits.

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
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
Water spray. Carbon dioxide (CO2). Dry chemical. Alcohol resistant foam. Use
 extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media
No information available.

5.2. Special hazards arising from the substance or mixture
Hazardous combustion products
Thermal decomposition can lead to release of irritating and toxic gases and vapors.

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
Use personal protection equipment. Avoid contact with skin, eyes or clothing. Handle in accordance with good industrial hygiene and safety practice.
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 containers tightly closed in a dry, cool and well-ventilated place. Keep in properly labeled containers. Keep from freezing.

7.3. Specific end use(s)
Specific Uses
No information available.

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters
Exposure limits

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Italy</th>
<th>Portugal</th>
<th>Netherlands</th>
<th>Finland</th>
<th>Denmark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Synthetic Amorphous Silica</td>
<td></td>
<td></td>
<td></td>
<td>TWA: 5 mg/m³</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Austria</th>
<th>Switzerland</th>
<th>Poland</th>
<th>Norway</th>
<th>Ireland</th>
</tr>
</thead>
<tbody>
<tr>
<td>Synthetic Amorphous Silica</td>
<td>TWA: 4 mg/m³</td>
<td></td>
<td>TWA: 10.0 mg/m³</td>
<td>TWA: 2 mg/m³</td>
<td></td>
</tr>
</tbody>
</table>

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>Liquid</td>
<td></td>
</tr>
<tr>
<td>Appearance</td>
<td>Opaque, Amber</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>282 °C</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>Unspecified</td>
<td></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>No information available</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>0.95</td>
<td>No information available</td>
</tr>
<tr>
<td>Water Solubility</td>
<td>Emulsifiable</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>
</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>Eyes</th>
<th>Contact with eyes may cause irritation. Avoid contact with eyes.</th>
</tr>
</thead>
<tbody>
<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>
</tbody>
</table>

Unknown acute toxicity Not applicable.

| ATEmix (oral)         | 13,675.00 mg/kg                                               |
| ATEmix (dermal)       | 7,471.00 mg/kg                                                |
| ATEmix (inhalation-dust/mist) | No data available                                   |

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Oral LD50</th>
<th>Dermal LD50</th>
<th>Inhalation LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Synthetic Amorphous Silica</td>
<td>&gt; 5000 mg/kg (Rat)</td>
<td>&gt; 5000 mg/kg (Rabbit)</td>
<td>LC0: &gt;= 0.139 mg/l (4hr). Maximum attainable concentration. No deaths occurred.</td>
</tr>
<tr>
<td>Synthetic Amorphous Silica</td>
<td>&gt; 5000 mg/kg (Rat)</td>
<td>&gt; 5000 mg/kg (Rabbit)</td>
<td>LC50: &gt;= 0.139 mg/l (4hr). Maximum attainable concentration.</td>
</tr>
</tbody>
</table>
No deaths occurred.

Organosiloxane > 24 g/kg (Rat) > 17 g/kg (Rat) > 2 g/kg (Rabbit)
Polyalkylene glycol ester > 20 g/kg (Rat) = 53 mL/kg (Rat)
Sorbitan derivative > 60 mL/kg (Rat)

Skin Corrosion/Irritation No information available.
Eye damage/irritation No information available.
Sensitization No information available.
Mutagenic effects No information available.
Reproductive Effects No information available.
STOT - single exposure No information available.
STOT - repeated exposure No information available.
Aspiration Hazard No information available.
Carcinogenic effects No information available.

### Section 12: ECOLOGICAL INFORMATION

#### 12.1. Toxicity

Ecotoxicity

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Algae</th>
<th>Fish</th>
<th>Daphnia magna</th>
</tr>
</thead>
<tbody>
<tr>
<td>Synthetic Amorphous Silica</td>
<td>EC50, 72h: Pseudokirchneriella subcapitata: 440 mg/L</td>
<td>LC50: &gt;10000 96h (Brachydanio rerio)</td>
<td>EC50: &gt;10000 24h</td>
</tr>
<tr>
<td>Synthetic Amorphous Silica</td>
<td>-</td>
<td>LC50: &gt;10000 mg/L, 96h (Brachydanio rerio)</td>
<td>EC50: &gt;10000, 24h (daphnia)</td>
</tr>
<tr>
<td>Sorbitan derivative</td>
<td>-</td>
<td>LC50 (96 h): 90 mg/l (Rainbow trout)</td>
<td>-</td>
</tr>
</tbody>
</table>

Unknown Aquatic Toxicity Not applicable.

### Persistence and degradability

#### 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

Section 15: REGULATORY INFORMATION

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 (IECSC)
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 Minimum classification

Issue Date: 2018-10-03
Revision Date: 2019-07-11
Reason for revision Not applicable.

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