This safety data sheet complies with the requirements of:

Issue Date: 2015-10-15  Revision Date: 2019-04-01  Revision Number: 5

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

1.1. Product identifier

Product name          MAGRABAR® PD-3500
Material No.          7514
Historic Material No. RM11402

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

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  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). Foam. Dry chemical.

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. Produce flammable and toxic gases on contact with water.
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: Ensure adequate ventilation. Handle in accordance with good industrial hygiene and safety practice. Use personal protection equipment.

General Hygiene Considerations: Handle in accordance with good industrial hygiene and safety practice. Wash hands thoroughly after handling.

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions: Keep containers tightly closed in a dry, cool and well-ventilated place. Keep cool. Protect from sunlight. Keep away from open flames, hot surfaces and sources of ignition. 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: 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. Ensure that eyewash stations and safety showers are close to the workstation location.

Personal protective equipment

Eye/Face Protection

Safety glasses with side-shields.

Skin protection

Long sleeved clothing. Wear protective nitrile rubber 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>&gt; 200 °C</td>
<td>No information available</td>
</tr>
<tr>
<td>Flash Point</td>
<td>&gt; 282 °C</td>
<td>Open cup</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>No information available</td>
<td>No information available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
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<td>No information available</td>
</tr>
<tr>
<td>Flammability Limit in Air</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Upper flammability limit</td>
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</tr>
<tr>
<td>Lower flammability limit</td>
<td>No information available</td>
<td>No information available</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>&lt; 1 mmHg</td>
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</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>
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</tr>
<tr>
<td>Water Solubility</td>
<td>Emulsifiable</td>
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</tr>
<tr>
<td>Solubility in other solvents</td>
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</tr>
<tr>
<td>Partition coefficient: n-octanol/water</td>
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<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>
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<td>No information available</td>
</tr>
<tr>
<td>Explosive properties</td>
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<td>No information available</td>
</tr>
<tr>
<td>Oxidizing properties</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  Carbon monoxide. Carbon dioxide (CO2). Fumes.

Section 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Acute Toxicity

Product Information

Eyes  Contact with eyes may cause irritation. Avoid contact with eyes.
Skin  May be harmful in contact with skin. Avoid contact with skin.
Inhalation  Health injuries are not known or expected under normal use.
Ingestion  Health injuries are not known or expected under normal use.

Unknown acute toxicity  Not applicable.

ATEmix (oral)  No data available
ATEmix (dermal)  No data available
ATEmix (inhalation-dust/mist)  No data available

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>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

Persistence and degradability

Persistence and degradability

12.3. Bioaccumulative potential

Bioaccumulation/Accumulation

12.4. Mobility in soil

Mobility in Environmental Media

12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment

12.6. Other adverse effects

Other adverse effects

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
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: 2015-10-15
Revision Date: 2019-04-01
Reason for revision: SDS sections updated, 1, 3, 16.
This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

Disclaimer
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End of Safety Data Sheet