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

1.1. Product identifier

Product name          MAGRABAR J-305 IP
Material No.         7741
Historic Material No. F0810

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]

EUH210 - Safety data sheet available on request

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  Dry chemical. Carbon dioxide (CO2). Alcohol-resistant foam.

Unsuitable Extinguishing Media  No information available.

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products  Varied particulate matter. 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

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 container tightly closed in a dry and well-ventilated place. Keep in properly labeled containers. Keep away from direct sunlight. Incompatible with oxidizing agents.

7.3. Specific end use(s)

Specific Uses

No information available.

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Exposure limits

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
Safety glasses with side-shields.

Skin protection
Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact. 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>Amber</td>
<td></td>
</tr>
<tr>
<td>Odor</td>
<td>Mild</td>
<td></td>
</tr>
<tr>
<td>Odor threshold</td>
<td>No information available</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
<th>Remarks/Method</th>
</tr>
</thead>
<tbody>
<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; 150 °C</td>
<td>No information available</td>
</tr>
<tr>
<td>Flash Point</td>
<td>100 °C</td>
<td>CC (closed 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>
<td>No information available</td>
<td>No information available</td>
</tr>
<tr>
<td>Flammability Limit in Air</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Upper flammability limit</td>
<td>No information available</td>
<td>No information available</td>
</tr>
<tr>
<td>Lower flammability limit</td>
<td>No information available</td>
<td>No information available</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>1 mmHg</td>
<td>No information available</td>
</tr>
<tr>
<td>Vapor density</td>
<td>&gt; 1</td>
<td>No information available</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>0.94 - 0.99</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>&gt; 250 °C</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>No information available</td>
<td>None under normal processing</td>
</tr>
<tr>
<td>Oxidizing properties</td>
<td>No information available</td>
<td>None under normal processing</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. Carbon monoxide. Carbon dioxide (CO2).

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

Substance may cause slight skin irritation. 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) 16,105.00 mg/kg
ATEmix (dermal) 14,281.00 mg/kg
ATEmix (inhalation-dust/mist) 39.05 mg/L

Component Information

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Oral LD50</th>
<th>Dermal LD50</th>
<th>Inhalation LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glycerol</td>
<td>= 12600 mg/kg (Rat)</td>
<td>&gt; 10 g/kg (Rabbit)</td>
<td>&gt; 570 mg/m³ (Rat) 1 h</td>
</tr>
<tr>
<td>Propylene Glycol</td>
<td>= 20 g/kg (Rat)</td>
<td>= 20800 mg/kg (Rabbit)</td>
<td></td>
</tr>
</tbody>
</table>

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>Glycerol</td>
<td>-</td>
<td>51 - 57: 96 h Oncorhynchus mykiss mL/L LC50 static</td>
<td>500: 24 h Daphnia magna mg/L EC50</td>
</tr>
<tr>
<td>Propylene Glycol</td>
<td>19000: 96 h Pseudokirchneriella subcapitata mg/L EC50</td>
<td>LC50: 710-55770 mg/L, 96h (Fathead minnow)</td>
<td>EC50: &gt; 10000 mg/L 48 h</td>
</tr>
</tbody>
</table>

Unknown Aquatic Toxicity Not applicable.

Persistence and degradability

| Persistence and degradability | No information available. |

12.3. Bioaccumulative potential

Bioaccumulation/Accumulation

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Partition coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glycerol</td>
<td>-1.76</td>
</tr>
</tbody>
</table>

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
<table>
<thead>
<tr>
<th>Classification procedure</th>
<th>Minimum classification</th>
</tr>
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<tbody>
<tr>
<td>Issue Date:</td>
<td>2015-12-29</td>
</tr>
<tr>
<td>Revision Date:</td>
<td>2019-07-09</td>
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<tr>
<td>Reason for revision</td>
<td>SDS sections updated, 11, 12, 15.</td>
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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