Material Safety Data Sheet acc. REACH
conform to Annex II (Requirements for the compilation of safety data sheets), Directive EU 2015/830 (28.05.2015)
Modified: 8/10/2016 Printed: 24/04/2018 MSDS Mantrocel Page 1

1 Identification of the substance/mixture and of the company

1.1 Product identifier

Hypromellose

<table>
<thead>
<tr>
<th>Trade Name</th>
<th>MANTROCEL, all grades</th>
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1.2 Relevant identified uses of the substance or mixture and uses advised against

Gel forming agent, binder, coating agent in pharmaceuticals, food and cosmetics.

1.3 Details of the supplier of the safety data sheet

GUSTAV PARMENTIER GmbH
Eichendorffstrasse 37
D-60320 Frankfurt am Main
GERMANY
Tel.: + 49 (0)69 / 56 10 34
Fax: + 49 (0)69 / 56 85 18
E-Mail: msds@parmentier.de

1.4 Emergency telephone number

Giftinformationszentrum Mainz
Langenbeckstrasse 1
D-55131 Mainz
GERMANY
Tel.: + 49 (0)6131 / 19240

2 Hazards identification

2.1 Classification of the substance or mixture

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

2.2 Label elements

None

2.3 Other hazards

No hazardous effects on health and environment known.

3 Composition/information on ingredients

3.1 Substances

Hydroxypropyl Methylcellulose
CAS-Nr.: 9004-65-3

4 First aid measures

4.1 Description of first aid measures

After eye and skin contact flush off with water.
After ingestion drink sufficient water. Consult a physician if feeling unwell.
After inhalation move affected person to fresh air. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

No data available

4.3 Indication of any immediate medical attention and special treatment needed

If problems resist, consult a physician.
5 Firefighting measures

5.1 Extinguishing media

All known extinguishing agents

5.2 Special hazards arising from the substance or mixture

No data available

5.3 Advice for firefighters

Use air supplied equipment for fighting interior fires.

6 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid dust formation. Do not inhale vapors/ mist/ gas.

6.2 Environmental precautions

Keep away in larger quantities from bodies of water or sewage systems.

6.3 Methods and material for containment and cleaning up

Pick up and arrange disposal. Sweep up and shovel. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For disposal see section 13.

7 Handling and storage

7.1 Precautions for safe handling

Avoid formation of dust and aerosols. Assure adequate ventilation after dust formation. Normal measures for preventive fire protection.

7.2 Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

7.3 Specific end use(s)

No data available

8 Exposure controls/personal protection

8.1 Control parameters

Does not contain substances with maximum allowable concentrations.

8.2 Exposure controls

General industrial hygiene practice

9 Physical and chemical properties

9.1 Information on basic physical and chemical properties

a) Appearance: White to off-white powder

b) Odour: Characteristic like glue

c) Odour threshold: No data available

d) pH-Value(2% w/v at 25 °C): 5.0 - 8.0

e) Melting point/freezing point: No melting point, glass transition at 170 - 180 °C. Browns at 190 - 200 °C, chars at 225 - 230 °C.

f) Initial boiling point and boiling range: Decomposition before ebullition
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9.2 Other information
None

10 Stability and reactivity

10.1 Reactivity
No data available

10.2 Chemical stability
Stable under normal conditions.

10.3 Possibility of hazardous reactions
No hazardous reactions known.

10.4 Conditions to avoid
Exposure to moisture may affect product quality.

10.5 Incompatible materials
No data available

10.6 Hazardous decomposition products
No hazardous decomposition products known.

11 Toxicological information

11.1 Information on toxicological effects

a) Acute toxicity: LD50 rat, i.p.) = 5 g/kg
b) Skin corrosion/irritation: No skin corrosion or irritation.
c) Serious eye damage/irritation: No eye corrosion or irritation.
d) Respiratory or skin sensitisation: Causes no skin sensitisation. Effect on respiratory tract is unknown.
e) Germ cell mutagenicity: No evidence of germ cell mutagenicity.
f) Carcinogenicity: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

g) Reproductive toxicity: No evidence of reproductive toxicity.
h) STOT-single exposure: No data available
i) STOT-repeated exposure: No data available
j) Aspiration hazard: No data available

12 Ecological information
12.1 Toxicity Water hazard class 1 (according to Annex 3 of VwVwS from 17.05.1999)
12.2 Persistence and degradability No data available
12.3 Bioaccumulative potential No data available
12.4 Mobility in soil No data available
12.5 Results of PBT and vPvB assessment No data available
12.6 Other adverse effects No data available

13 Disposal considerations
13.1 Waste treatment methods Remove mechanically. Burning or deposition.

14 Transport information
14.1 UN number None
14.2 UN proper shipping name None
14.3 Transport hazard class(es) The product is not classified in ADR/IATA/IMGD/RID - guidelines.
14.4 Packing group None
14.5 Environmental hazards None
14.6 Special precautions for user None
14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code None
15 Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

None

15.2 Chemical safety assessment

No obligatory information on health and environmental protection

16 Other information

INCI Name: HYDROXYPROPYL METHYCELLULOSE
E-Number: E 464
For further product information please see: www.parmentier.de