1.1 Product identifier

Trade name: Starch

Amylum
Potato starch
Solani amylum
Maize starch
Maydis amylum
Rice starch
Oryzae amylum
Wheat starch
Tritic amylum

Product Code:
100698
101023
105475
101156
104828
100837

CAS Number:
9005-25-8

EC number:
232-679-6

Application of the substance / the mixture Additive for cosmetic or pharamaceutical preparations

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier:
Fagron Inc
2400 Pilot Knob Road
St. Paul, MN 55120
www.fagron.us
QA@fagron.us

Information department:
Tel.: 800-423-6967
Fax: 800-339-1596

1.4 Emergency telephone number:
Emergency Telephone:
US: 1-800-535-5053
International: 1-352-323-3500

2 Hazard(s) identification

2.1 Classification of the substance or mixture
Classification according to Regulation (EC) No 1272/2008
The substance is not classified, according to the CLP regulation.

2.2 Label elements
Labeling according to Regulation (EC) No 1272/2008 Void
Hazard pictograms Void
Signal word Void
Hazard statements Void

2.3 Other hazards
Results of PBT and vPvB assessment
PBT: Not applicable.

(Contd. on page 2)
3 Composition/information on ingredients

- 3.1 Chemical characterization: Substances
- CAS No. Description
  9005-25-8 Starch
  Amylum
  Potato starch
  Solani amylum
  Maize starch
  Maydis amylum
  Rice starch
  Oryzae amylum
  Wheat starch
  Tritici amylum
- Identification number(s)
- EC number: 232-679-6

4 First-aid measures

- 4.1 Description of first aid measures
- General information: No special measures required.
- After inhalation: Supply fresh air; consult doctor in case of complaints.
- After skin contact: Generally the product does not irritate the skin.
- After eye contact: Rinse opened eye for several minutes under running water.
- After swallowing: Rinse out mouth and then drink plenty of water.
- 4.2 Most important symptoms and effects, both acute and delayed No further relevant information available.
- 4.3 Indication of any immediate medical attention and special treatment needed
  No further relevant information available.

5 Fire-fighting measures

- 5.1 Extinguishing media
  Suitable extinguishing agents: Use fire fighting measures that suit the environment.
- 5.2 Special hazards arising from the substance or mixture
  No further relevant information available.
5.3 Advice for firefighters
   - Protective equipment: No special measures required.

6 Accidental release measures
   - 6.1 Personal precautions, protective equipment and emergency procedures
     Wear protective equipment. Keep unprotected persons away.
   - 6.2 Environmental precautions: Do not allow to enter sewers/surface or ground water.
   - 6.3 Methods and material for containment and cleaning up: Pick up mechanically.
   - 6.4 Reference to other sections
     No dangerous substances are released.
     See Section 7 for information on safe handling.
     See Section 8 for information on personal protection equipment.
     See Section 13 for disposal information.
   - Protective Action Criteria for Chemicals
     PAC-1: Substance is not listed.
     PAC-2: Substance is not listed.
     PAC-3: Substance is not listed.

7 Handling and storage
   - 7.1 Precautions for safe handling
     Prevent formation of dust.
   - 7.2 Conditions for safe storage, including any incompatibilities
     Storage:
     - Requirements to be met by storerooms and receptacles: No special requirements.
     - Information about storage in one common storage facility: Not required.
     - Further information about storage conditions: Store in dry conditions.
   - 7.3 Specific end use(s)
     No further relevant information available.

8 Exposure controls/personal protection
   - Additional information about design of technical systems: No further data; see item 7.
8.1 Control parameters

Components with limit values that require monitoring at the workplace:

<table>
<thead>
<tr>
<th>9005-25-8 Starch</th>
<th>Amylum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potato starch</td>
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</tr>
<tr>
<td>Wheat starch</td>
<td>Tritici amylum</td>
</tr>
</tbody>
</table>

PEL Long-term value: 15* 5** mg/m³
**total dust **respirable fraction
REL Long-term value: 10* 5** mg/m³
**total dust **respirable fraction
TLV Long-term value: 10 mg/m³

Additional information: The lists that were valid during the creation were used as basis.

8.2 Exposure controls

Personal protective equipment:

General protective and hygienic measures:
The usual precautionary measures for handling chemicals should be followed.

Breathing equipment: Fresh air mask

Protection of hands:
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

Material of gloves
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

Penetration time of glove material
The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye protection: Not required.
### 9 Physical and chemical properties

<table>
<thead>
<tr>
<th>9.1 Information on basic physical and chemical properties</th>
</tr>
</thead>
<tbody>
<tr>
<td>- General Information</td>
</tr>
<tr>
<td>- Appearance:</td>
</tr>
<tr>
<td>- Form: Powder</td>
</tr>
<tr>
<td>- Color: White</td>
</tr>
<tr>
<td>- Odor: Odorless</td>
</tr>
<tr>
<td>- Odor threshold: Not determined.</td>
</tr>
<tr>
<td>- pH-value: Not applicable.</td>
</tr>
<tr>
<td>- Change in condition</td>
</tr>
<tr>
<td>- Melting point/Melting range: Undetermined.</td>
</tr>
<tr>
<td>- Boiling point/Boiling range: Undetermined.</td>
</tr>
<tr>
<td>- Flash point: Not applicable.</td>
</tr>
<tr>
<td>- Flammability (solid, gaseous): Product is not flammable.</td>
</tr>
<tr>
<td>- Not determined.</td>
</tr>
<tr>
<td>- Not applicable.</td>
</tr>
<tr>
<td>- Ignition temperature: ~400 °C (~752 °F)</td>
</tr>
<tr>
<td>- Decomposition temperature: Not determined.</td>
</tr>
<tr>
<td>- Auto igniting: Not determined.</td>
</tr>
<tr>
<td>- Danger of explosion: Product does not present an explosion hazard.</td>
</tr>
<tr>
<td>- Explosion limits:</td>
</tr>
<tr>
<td>- Lower: Not determined.</td>
</tr>
<tr>
<td>- Upper: Not determined.</td>
</tr>
<tr>
<td>- Vapor pressure: Not applicable.</td>
</tr>
<tr>
<td>- Density: Not determined.</td>
</tr>
<tr>
<td>- Relative density: Not determined.</td>
</tr>
<tr>
<td>- Vapor density: Not applicable.</td>
</tr>
<tr>
<td>- Evaporation rate: Not applicable.</td>
</tr>
<tr>
<td>- Solubility in / Miscibility with Water: Insoluble.</td>
</tr>
</tbody>
</table>

(Contd. on page 6)
Safety Data Sheet
acc. to OSHA HCS

Trade name: Starch
  Amylum
  Potato starch
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(Contd. of page 5)

- Partition coefficient (n-octanol/water): Not determined.
- Viscosity:
  Dynamic: Not applicable.
  Kinematic: Not applicable.
- 9.2 Other information
  No further relevant information available.

10 Stability and reactivity

- 10.1 Reactivity No further relevant information available.
- 10.2 Chemical stability
  - Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
  - 10.3 Possibility of hazardous reactions
    Reacts with oxidizing agents.
    Risk of dust explosion.
- 10.4 Conditions to avoid No further relevant information available.
- 10.5 Incompatible materials: No further relevant information available.
- 10.6 Hazardous decomposition products: Carbon monoxide and carbon dioxide

11 Toxicological information

- 11.1 Information on toxicological effects
  - Acute toxicity: Based on available data, the classification criteria are not met.
  - Primary irritant effect:
    - on the skin: Based on available data, the classification criteria are not met.
    - on the eye: Based on available data, the classification criteria are not met.
  - Sensitization: Based on available data, the classification criteria are not met.
  - Additional toxicological information:
    - Carcinogenic categories
      - IARC (International Agency for Research on Cancer) Substance is not listed.
      - NTP (National Toxicology Program) Substance is not listed.
      - OSHA-Ca (Occupational Safety & Health Administration) Substance is not listed.

12 Ecological information

- 12.1 Toxicity
  Aquatic toxicity: No further relevant information available.
- 12.2 Persistence and degradability No further relevant information available.

(Contd. on page 7)
13 Disposal considerations

- **13.1 Waste treatment methods**
  - **Recommendation:**
    Must be specially treated adhering to official regulations.
    Smaller quantities can be disposed of with household waste.

- **Uncleaned packagings:**
  - **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

- **14.1 UN-Number**
  - DOT, ADR, ADN, IMDG, IATA: Void

- **14.2 UN proper shipping name**
  - DOT, ADR, ADN, IMDG, IATA: Void

- **14.3 Transport hazard class(es)**
  - DOT, ADR, ADN, IMDG, IATA: Void

- **14.4 Packing group**
  - DOT, ADR, IMDG, IATA: Void

- **14.5 Environmental hazards:**
  - Not applicable.

- **14.6 Special precautions for user**
  - Not applicable.
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14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code: Not applicable.

- Transport/Additional information: Not dangerous according to the above specifications.
- UN "Model Regulation": Void

15 Regulatory information

15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This SDS is intended to provide a brief summary of our knowledge and guidance regarding the use of this material. The information contained here has been compiled from sources considered to be dependable and is accurate to the best of the Company's knowledge. However, the information is provided without any representation or warranty, expressed or implied regarding its accuracy or correctness. The Company cannot assume responsibility for adverse events which may occur in the use and/or misuse of this product and expressly disclaims liability for loss, damage and/or expense arising out of or in any way connected with the handling, storage, use and/or disposal of this product.

- Department issuing SDS: Fagron US
  Quality Assurance
- Contact: QA@fagron.us
- Date of preparation / last revision 05/07/2019 / 14
- Abbreviations and acronyms:
  RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
  ICAO: International Civil Aviation Organisation
  ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
  IMDG: International Maritime Code for Dangerous Goods
  DOT: US Department of Transportation
  IATA: International Air Transport Association
  GHS: Globally Harmonised System of Classification and Labelling of Chemicals
  EINECS: European Inventory of Existing Commercial Chemical Substances
  CAS: Chemical Abstracts Service (division of the American Chemical Society)
  PBT: Persistent, Bioaccumulative and Toxic
  vPvB: very Persistent and very Bioaccumulative
  OSHA: Occupational Safety & Health
  TLV: Threshold Limit Value
  PEL: Permissible Exposure Limit
  REL: Recommended Exposure Limit
- * Data compared to the previous version altered.