<table>
<thead>
<tr>
<th>Product code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>G8781</td>
<td>Magne™ Protein A Beads, 20% Slurry</td>
</tr>
</tbody>
</table>

Components:

| G878         | Magne™ Protein A Beads           |
1 Identification

**Product identifier**
*Trade name: Magne™ Protein A Beads*

**Article number:** G878

**Application of the substance / the mixture** Laboratory chemicals

**Details of the supplier of the safety data sheet**

**Manufacturer/Supplier:**
Promega Corporation
2800 Woods Hollow Road
Madison, WI 53711
U.S.A.
1-800-356-9526 or (608)-274-4330

**Information department:** SDS author: Regulatory.Affairs@promega.com

**Emergency telephone number:**
For Chemical Emergency Spill, Leak, Fire, Exposure, or Accident Call CHEMTREC Day or Night Within USA and Canada: 1-800-424-9300
Outside USA and Canada: +1 703-527-3887 (collect calls accepted)

2 Hazard(s) identification

**Classification of the substance or mixture**

[Flame]

*GHS02 Flame*

*Flam. Liq. 3 H226 Flammable liquid and vapor.*

**Label elements**

**GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).

**Hazard pictograms** GHS02

**Signal word** Warning

**Hazard statements**
Flammable liquid and vapor.

**Precautionary statements**
Take precautionary measures against static discharge.
Use explosion-proof electrical/ventilating/lighting/equipment.
Wear protective gloves / eye protection / face protection.
Keep away from heat/sparks/open flames/hot surfaces. No smoking.
Keep container tightly closed.
Ground/bond container and receiving equipment.
Use only non-sparking tools.
If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
In case of fire: Use for extinction: CO2, powder or water spray.
Store in a well-ventilated place. Keep cool.
Dispose of contents/container in accordance with local/regional/national/international regulations.

(Contd. on page 2)
Trade name: Magne™ Protein A Beads

Classification system:
NFPA ratings (scale 0 - 4)
Health = 0
Fire = 2
Reactivity = 0
HMIS-ratings (scale 0 - 4)
Health = 0
Fire = 2
Reactivity = 0

OSHA Hazard Overview (Criteria according to 29CFR1910.1200): Not applicable

Primary route(s) of entry: Oral

Target Organ(s):
May cause Liver damage (Hepatotoxin)
May affect Nervous system (Neurotoxin)

Other hazards: Keep away from sources of ignition.

Results of PBT and vPvB assessment
PBT: Not applicable.
vPvB: Not applicable.

3 Composition/information on ingredients

Chemical characterization: Mixtures

Description:
The product is a mixture of the hazardous substances listed below along with unlisted nonhazardous substances. The exact concentration percentages of the hazardous substances may be withheld as a Promega Corp. trade secret.

Dangerous components:

<table>
<thead>
<tr>
<th>Chemical Code</th>
<th>Substance</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>9004-34-6</td>
<td>Cellulose</td>
<td>15-20%</td>
</tr>
<tr>
<td>64-17-5</td>
<td>ethanol</td>
<td>15-20%</td>
</tr>
</tbody>
</table>

Additional information: For the wording of the listed risk phrases refer to section 15.

4 First-aid measures

Description of first aid measures
After inhalation: If the patient feels unwell or is concerned, obtain medical advice.
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: If the patient feels unwell or is concerned, obtain medical advice.

Information for doctor:
Most important symptoms and effects, both acute and delayed
Headache
Dizziness
Dizziness
Nausea

Indication of any immediate medical attention and special treatment needed
No further relevant information available.
5 Fire-fighting measures

Extinguishing media
Suitable extinguishing agents: Use fire fighting measures that suit the environment.
Special hazards arising from the substance or mixture None known
Advice for firefighters No special advice

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures
Remove persons from danger area.
Wear protective equipment. Keep unprotected persons away.
Keep away from ignition sources
Wear protective clothing.
Environmental precautions: Dilute with plenty of water.
Methods and material for containment and cleaning up:
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Reference to other sections
See Section 7 for information on safe handling.
See Section 13 for disposal information.

7 Handling and storage

Handling:
Precautions for safe handling Use only in well ventilated areas.
Information about protection against explosions and fires:
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
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: Keep receptacle tightly sealed.
Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

Control parameters

<table>
<thead>
<tr>
<th>Components with limit values that require monitoring at the workplace:</th>
</tr>
</thead>
<tbody>
<tr>
<td>9004-34-6 Cellulose</td>
</tr>
<tr>
<td>PEL Long-term value: 15* 5** mg/m³</td>
</tr>
<tr>
<td>*total dust **respirable fraction</td>
</tr>
<tr>
<td>REL Long-term value: 10* 5** mg/m³</td>
</tr>
<tr>
<td>*total dust **respirable fraction</td>
</tr>
<tr>
<td>TLV Long-term value: 10 mg/m³</td>
</tr>
<tr>
<td>64-17-5 ethanol</td>
</tr>
<tr>
<td>PEL Long-term value: 1900 mg/m³, 1000 ppm</td>
</tr>
<tr>
<td>REL Long-term value: 1900 mg/m³, 1000 ppm</td>
</tr>
</tbody>
</table>
* **9 Physical and chemical properties**

**Information on basic physical and chemical properties**

**General Information**

<table>
<thead>
<tr>
<th>Appearance</th>
<th>Fluid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color</td>
<td>Colorless</td>
</tr>
<tr>
<td>Odor</td>
<td>Alcohol-like</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>Not determined.</td>
</tr>
</tbody>
</table>

**Change in condition**

| Melting point/Melting range | Undetermined. |
| Boiling point/Boiling range | 100 °C (212 °F) |
| Flash point | 23 - 60 °C (73 - 140 °F) |

**Flammability (solid, gaseous):** Not applicable.

**Ignition temperature:** 340 °C (644 °F)

**Decomposition temperature:** Not determined.

**Auto igniting:** Product is not selfigniting.

**Danger of explosion:** Product does not present an explosion hazard. Product is not explosive. However, formation of explosive air/vapor mixtures are possible.

**Explosion limits:**

<table>
<thead>
<tr>
<th>Lower</th>
<th>3.5 Vol %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upper</td>
<td>15.0 Vol %</td>
</tr>
<tr>
<td>Vapor pressure at 20 °C (68 °F):</td>
<td>59 hPa (44 mm Hg)</td>
</tr>
</tbody>
</table>

**Density:** Not determined.

**Relative density** Not determined.

**Vapor density** Not determined.

**Evaporation rate** Not determined.

**Solubility in / Miscibility with Water:** Fully miscible.

**Partition coefficient (n-octanol/water):** Not determined.
Safety Data Sheet
acc. to OSHA HCS

Trade name: Magne™ Protein A Beads

Viscosity:
- Dynamic: Not determined.
- Kinematic: Not determined.

Organic solvents: 16.0 %
Water: 64.0 %
VOC content: 16.0 %
Other information: No further relevant information available.

10 Stability and reactivity

Reactivity: No further relevant information available.
Chemical stability:
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- Possibility of hazardous reactions: No dangerous reactions known.
- Conditions to avoid: No further relevant information available.
- Incompatible materials: No further relevant information available.
- Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

Information on toxicological effects:
- Acute toxicity:
  - LD/LC50 values that are relevant for classification: No data available
- Primary irritant effect:
  - on the skin: No irritant effect.
  - on the eye: Irritating effect.
- Sensitization: No sensitizing effects known.
- Additional toxicological information:

Carcinogenic categories:

IARC (International Agency for Research on Cancer)
- 64-17-5 ethanol

NTP (National Toxicology Program)
- None of the ingredients are listed.

OSHA-Ca (Occupational Safety & Health Administration)
- None of the ingredients are listed.

12 Ecological information

Toxicity:
- Aquatic toxicity: Not harmful to the aquatic environment
- Persistence and degradability: Not available
- Behavior in environmental systems:
- Bioaccumulative potential: Not known
- Mobility in soil: No further relevant information available.
- Ecotoxicological effects:
- Remark: Not available
- Additional ecological information:
- General notes: Generally not hazardous for water.
43.0

Results of PBT and vPvB assessment
PBT: Not applicable.
vPvB: Not applicable.
Other adverse effects: No further relevant information available.

13 Disposal considerations

Waste treatment methods
Recommendation:
Disposal should be in accordance with applicable regional, national and local laws and regulations.
Refer to Section 7: Handling and Storage and Section 8: Exposure Control/Personal Protection for additional handling information and protection of employees.

Uncleaned packagings:
Recommendation: Disposal must be made according to official regulations.
Recommended cleansing agent: Water, if necessary with cleansing agents.

14 Transport information

| UN-Number | Not hazardous for transportation |
| DOT, ADR, ADN, IMDG, IATA | Void |
| UN proper shipping name | None |
| DOT, ADR, ADN, IMDG, IATA | Void |
| Transport hazard class(es) | None |
| DOT, ADR, ADN, IMDG, IATA | Void |
| Class | Void |
| Packing group | None |
| DOT, ADR, IMDG, IATA | Void |
| Environmental hazards: | No |
| Marine pollutant: | Not applicable. |
| Special precautions for user | Not applicable. |
| Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code | Not applicable. |
| UN "Model Regulation": | Void |

15 Regulatory information

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

Sara

Section 355 (extremely hazardous substances):
None of the ingredients are listed.

Section 313 (Specific toxic chemical listings):
None of the ingredients are listed.

TSCA (Toxic Substances Control Act):
All ingredients are listed.
### Proposition 65

- **Chemicals known to cause cancer:**
  - None of the ingredients are listed.

- **Chemicals known to cause reproductive toxicity for females:**
  - None of the ingredients are listed.

- **Chemicals known to cause reproductive toxicity for males:**
  - None of the ingredients are listed.

- **Chemicals known to cause developmental toxicity:**
  - CTC 64-17-5 ethanol

### Cancerogenity categories

- **EPA (Environmental Protection Agency)**
  - None of the ingredients are listed.

- **TLV (Threshold Limit Value established by ACGIH)**
  - CTC 64-17-5 ethanol A3

- **NIOSH-Ca (National Institute for Occupational Safety and Health)**
  - None of the ingredients are listed.

### GHS label elements

- The product is classified and labeled according to the Globally Harmonized System (GHS).

### Hazard statements

**Signal word:** Warning

**Flammable liquid and vapor.**

### Precautionary statements

- Take precautionary measures against static discharge.
- Use explosion-proof electrical/ventilating/lighting/equipment.
- Wear protective gloves / eye protection / face protection.
- Keep away from heat/sparks/open flames/hot surfaces. No smoking.
- Keep container tightly closed.
- Ground/bond container and receiving equipment.
- Use only non-sparking tools.
- If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
- In case of fire: Use for extinction: CO2, powder or water spray.
- Store in a well-ventilated place. Keep cool.
- Dispose of contents/container in accordance with local/regional/national/international regulations.

### National regulations

- **Water hazard class:** Generally not hazardous for water.
- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

### Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

**Department issuing SDS:**

Promega Corporation  
Environmental Health and Safety Department  
2800 Woods Hollow Road  
Madison, WI  
Ph: (608)274-4330  
**Date of preparation / last revision** 07/05/2016 / -
Abbreviations and acronyms:
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
ACGIH: American Conference of Governmental Industrial Hygienists
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
HMIS: Hazardous Materials Identification System (USA)
VOC: Volatile Organic Compounds (USA, EU)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
NIOSH: National Institute for Occupational Safety
OSHA: Occupational Safety & Health
TLV: Threshold Limit Value
PEL: Permissible Exposure Limit
REL: Recommended Exposure Limit
Flam. Liq. 3: Flammable liquids – Category 3

* Data compared to the previous version altered.