SAFETY DATA SHEET

GELSON

1.1. Product identifier

Product name: GELSON
Product code: refer to sales department

1.2. Relevant identified uses of the substance or mixture and uses advised against

Clarifying Agents
Industrial Manufacturing[SU3], Manufacture of food products[SU4], Public domain (administration, education, entertainment, services, craftsmen)[SU22]
Process aid for enological use
Not recommended uses
Do not use for purposes other than those listed

1.3. Details of the supplier of the safety data sheet

AEB SpA - Via Vittorio Arici 104 S.Polo - 25134 Brescia (BS) Italy Tel. +39.030.2307.1 Fax +39.030.2307281
E-mail: info@aub-group.com - Internet: www.aeb-group.com
E-mail tecnico competente/technical dept./Kompetenzzentrum: sds@aub-group.com

1.4. Emergency telephone number

Centralino/Switchboard/Telefonzentrale +39.030.2307.1 - (h 8.30-12.00 13.30-18.00)

SECTION 2. Hazards identification

2.1. Classification of the substance or mixture

2.1.1 Classification according to Regulation (EC) No 1272/2008:
Pictograms:
None
Hazard Class and Category Code(s):
Non hazardous
Hazard statement Code(s):
Non hazardous

2.1.2 Classification according to Directive 1999/45/EEC:
Classification:
Non hazardous
Nature of special risks attributed:
None in particular.

2.2. Label elements

Labelling according to Regulation (EC) No 1272/2008:
Pictogram, Signal Word Code(s):
None
Hazard statement Code(s):
Non hazardous
Supplemental Hazard statement Code(s):
EUH031 - Contact with acids liberates toxic gas.
Precautionary statements:
None in particular.
Contains:
POTASSIUM BISULPHITE - (<Sulphur dioxide and sulphites at concentrations of more than 10 mg/kg or 10 mg/litre expressed as SO₂> in compliance with Directive CE 68/2007 and subsequent additions and modifications), PORK GELATINE
Only for professional use
For limited use in foodstuffs: enological

2.3. Other hazards

The substance / mixture does NOT contain substances PBT/vPvB according to Regulation (EC) No 1907/2006, Annex XIII
No information on other hazards

SECTION 3. Composition/information on ingredients

3.1 Substances

Irrelevant

3.2 Mixtures

Refer to paragraph 16 for full text of risk phrases and hazard statements

<table>
<thead>
<tr>
<th>Substance</th>
<th>Concentration</th>
<th>Classification</th>
<th>Index</th>
<th>CAS</th>
<th>EINECS</th>
<th>REACH</th>
</tr>
</thead>
<tbody>
<tr>
<td>PORK GELATIN</td>
<td>&gt; 50 &lt;= 100%</td>
<td></td>
<td></td>
<td>9000-70-8</td>
<td>232-554-6</td>
<td></td>
</tr>
<tr>
<td>POTASSIUM BISULPHITE</td>
<td>&gt; 0,1 &lt;= 1%</td>
<td>XI; R36/37 R31 Eye Irrit. 2, H319</td>
<td>7773-03-7</td>
<td>231-870-1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

SECTION 4. First aid measures

4.1. Description of first aid measures

Inhalation:
Ventilate the area. Move immediately the contaminated patient from the area and keep him at rest in a well ventilated area. If you feel unwell seek medical advice.
Direct contact with skin (of the pure product):
Wash thoroughly with soap and running water.
Direct contact with eyes (of the pure product):
Wash immediately and thoroughly with running water for at least 10 minutes.

Ingestion:
Not hazardous. It's possible to give activated charcoal in water or medicinal mineral vaseline oil.

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

No data available.

SECTION 5. Firefighting measures
5.1. Extinguishing media

Suggested extinguishing media:
Water spray, CO2, foam, dry chemical, depending on the materials involved in the fire.
Extinguishing media to avoid:
Water jets. Use water jets only to cool the surfaces of the containers exposed to fire.

5.2. Special hazards arising from the substance or mixture

No data available.

5.3. Advice for firefighters

Use protection for the breathing apparatus
Safety helmet and full protective clothing.
The water spray can be used to protect the people involved in the extinction.
You may also use self-contained breathing apparatus, especially when working in confined and poorly ventilated areas and if you use halogenated extinguishers (Halon 1211 fluobrene, Solkan 123, NAF, etc...)
Keep containers cool with water spray

SECTION 6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1 For non-emergency personnel:
Leave the area surrounding the spill or release. Do not smoke
Wear gloves and protective clothing
6.1.2 For emergency responders:
Wear gloves and protective clothing
Eliminate all unguarded flames and possible sources of ignition. No smoking.
Provide a sufficient ventilation.
Evacuate the danger area and, in case, consult an expert.

6.2. Environmental precautions

Contain spills with earth or sand.
If the product has entered a watercourse, sewers or has contaminated soil or vegetation, notify the authorities.
Dispose of the waste material in compliance with the regulations

6.3. Methods and material for containment and cleaning up

6.3.1 Containment:
Recover the product for reuse, if possible, or for removal. Possibly absorb it with inert material.
Prevent it from entering the sewer system.
6.3.2 Cleaning up:
After wiping up, wash with water the area and materials involved
6.3.3 Other information:
None in particular.

6.4. Reference to other sections

Refer to paragraphs 8 and 13 for more information

SECTION 7. Handling and storage

7.1. Precautions for safe handling

Avoid contact and inhalation of vapors or dust. See also paragraph 8 below.
At work do not eat or drink.
7.2. Conditions for safe storage, including any incompatibilities

Keep in original container closed tightly. Do not store in open or unlabelled containers.
Keep containers upright and safe by avoiding the possibility of falls or collisions.
Store room temperature, do not store at temp. < 10°C, away from heat sources and direct exposure to sunlight.

7.3. Specific end use(s)

Industrial Manufacturing:
Handle with extreme caution.
Store in a well ventilated place away from heat sources.

Manufacture of food products:
Handle with care.
Store in a clean, dry, ventilated area away from heat and direct sunlight.
Keep container tightly closed.

Public domain (administration, education, entertainment, services, craftsmen):
Handle with care. Store in a ventilated area and away from heat, keep the container tightly closed.

SECTION 8. Exposure controls/personal protection

8.1. Control parameters

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Related to contained substances:
GELATIN
ACGIH-TLV: n.d.
OSHA-PEL: n.d.
POTASSIUM BISULPHITE
TLV STEL: 0.25 ppm (SO2)
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8.2. Exposure controls

Appropriate engineering controls:
Industrial Manufacturing:
No specific monitoring foreseen (act according to good practice and specific rules for the type of risk associated)

Manufacture of food products:
No specific monitoring foreseen (act according to good practice and specific rules for the type of risk associated)

Public domain (administration, education, entertainment, services, craftsmen):
No specific monitoring foreseen (act according to good practice and specific rules for the type of risk associated)

Individual protection measures:
(a) Eye / face protection
Wear protective goggles (EN 166).
(b) Skin protection
(i) Hand protection
Wear protective gloves (EN420).
(ii) Other
Wear normal work clothing.
(c) Respiratory protection
Not required when proper ventilation is provided. Alternatively use protective mask.
(d) Thermal hazards
No hazard to report

Environmental exposure controls:
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Related to contained substances:
GELATIN
Respiratory protection: the use of mask recommended to avoid possible discomfort caused by breathing in dust, although not dangerous.
Hand protection: not required
Eye protection: use protective eyewear is recommended in order to avoid possible discomfort caused by long exposure
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to dusts, although not dangerous.
Skin protection: not required
POTASSIUM BISULPHITE
Eye protection: safety goggles. Use closed safety masks, do not use eye lenses.
Skin protection: Wear clothing granting a total protection of the skin, eg. cotton, rubber, PVC or viton.
Hand protection: Use protective gloves granting a total protection, e.g. in PVC, rubber or neoprene.
Respiratory protection: where there is inadequate ventilation or prolonged exposure, employ a device for the respiratory protection, e.g. CEN/FFP-2 (S) or CEN/FFP-3 (S).
Thermal hazards: none
Environmental exposure controls: none

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Physical and chemical properties</th>
<th>Value</th>
<th>Determination method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Yellow clear liquid</td>
<td></td>
</tr>
<tr>
<td>Odour</td>
<td>not determined</td>
<td></td>
</tr>
<tr>
<td>Odour threshold</td>
<td>not determined</td>
<td></td>
</tr>
<tr>
<td>pH</td>
<td>5.6 ± 0.5 (20°C)</td>
<td></td>
</tr>
<tr>
<td>Melting point/freezing point</td>
<td>not determined</td>
<td></td>
</tr>
<tr>
<td>Initial boiling point and boiling range</td>
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<td></td>
</tr>
<tr>
<td>Flash point</td>
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<td>ASTM D92</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>irrelevant</td>
<td></td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
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<td></td>
</tr>
<tr>
<td>Upper/lower flammability or explosive limits</td>
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<td></td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>irrelevant</td>
<td></td>
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<tr>
<td>Vapour density</td>
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<td></td>
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<tr>
<td>Relative density</td>
<td>1.20 ± 0.05 (20°C)</td>
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<tr>
<td>Solubility</td>
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<tr>
<td>Water solubility</td>
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<tr>
<td>Partition coefficient: n-octanol/water</td>
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<tr>
<td>Auto-ignition temperature</td>
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<tr>
<td>Decomposition temperature</td>
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<tr>
<td>Viscosity</td>
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<tr>
<td>Explosive properties</td>
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<td></td>
</tr>
<tr>
<td>Oxidising properties</td>
<td>irrelevant</td>
<td></td>
</tr>
</tbody>
</table>

9.2. Other information

No data available.

SECTION 10. Stability and reactivity

10.1. Reactivity

Related to contained substances:
POTASSIUM BISULPHITE
Stable under normal conditions
10.2. Chemical stability

No hazardous reaction when handled and stored according to provisions.

10.3. Possibility of hazardous reactions

There are no hazardous reactions

10.4. Conditions to avoid

Nothing to report

10.5. Incompatible materials

It can generate flammable gases in contact with elementary metals, nitrides, inorganic sulfide, strong reducing agents.
It can generate toxic gases in contact with inorganic sulfide, strong reducing agents.

10.6. Hazardous decomposition products

Does not decompose when used for intended uses.

SECTION 11. Toxicological information

11.1. Information on toxicological effects

ATE(mix) oral = 0.0 mg/kg
ATE(mix) dermal = 0.0 mg/kg
ATE(mix) inhal = 0.0 mg/l/4 h
(a) acute toxicity: not applicable
(b) skin corrosion/irritation: not applicable
(c) serious eye damage/irritation: not applicable
(d) respiratory or skin sensitization: not applicable
(e) germ cell mutagenicity: not applicable
(f) carcinogenicity: not applicable
(g) reproductive toxicity: not applicable
(h) specific target organ toxicity (STOT) single exposure: not applicable
(i) specific target organ toxicity (STOT) repeated exposure: not applicable
(j) aspiration hazard: not applicable

Health Hazards:
Eye contact: Accidental contact of product with eyes may cause irritation.
Skin Contact: Product is not an irritant. Prolonged or repeated contact may defeat and irritate the skin and cause dermatitis in some cases.
Ingestion: The ingested product may cause irritation of the mucous membranes of the throat and digestive system leading to digestive symptoms and abnormal bowel disorders.
Inhalation: Prolonged exposure to vapours or mists of product may cause respiratory irritation.

SECTION 12. Ecological information

12.1. Toxicity

Use according to good working practices and avoid to disperse the product into the environment.

Related to contained substances:
GELATIN
Product is not toxic, although if downloaded in water, due to its high concentration of organic matter, may cause
eutrophication of waters.
POTASSIUM BISULPHITE
Use according to good working practices, avoiding to disperse the product into the environment.

12.2. Persistence and degradability

Related to contained substances:
GELATIN
Readily biodegradable.
POTASSIUM BISULPHITE
None

12.3. Bioaccumulative potential

Related to contained substances:
POTASSIUM BISULPHITE
None

12.4. Mobility in soil

Related to contained substances:
GELATIN
Totally soluble in water, so that its migration in the waters near the locate application possible.
POTASSIUM BISULPHITE
None

12.5. Results of PBT and vPvB assessment

The substance / mixture does NOT contain substances PBT/vPvB according to Regulation (EC) No 1907/2006, Annex XIII

12.6. Other adverse effects

No adverse effects

SECTION 13. Disposal considerations

13.1. Waste treatment methods

Do not reuse empty containers. Dispose of them in accordance with the regulations in force. Any remaining product should be disposed of according to applicable regulations by addressing to authorized companies.
Recover if possible. Operate according to local or national regulations

SECTION 14. Transport Information

14.1. UN number

Not included in the field of application of regulations concerning the transport of dangerous goods: by road (ADR); by rail (RID); by air (ICAO / IATA); by sea (IMDG).

14.2. UN proper shipping name

None
14.3. Transport hazard class(es)

None

14.4. Packing group

None

14.5. Environmental hazards

None

14.6. Special precautions for user

No data available.

14.7. Transport in bulk according to Annex II of MARPOL73/78 and IBC Code

Transport in bulk is not foreseen

SECTION 15. Regulatory information

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


15.2. Chemical safety assessment

No chemical safety assessment was carried out by the supplier

SECTION 16. Other information

16.1. Other information

Description of risk phrases see out in paragraph 3
R31 = Contact with acids liberates toxic gas.
R36 = Irritating to eyes.
R37 = Irritating to respiratory system.
Description of hazard statements set out in paragraph 3
H319 = Causes serious eye irritation.
Classification based on data of all mixture components
Main normative references:
Directive 1999/45/EC.
Directive 2001/60/EC.
Regulation 1272/2008/EC.
Regulation 2010/453/EC.
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Changes to the previous edition: § 2.2; § 3.2; § 7.2