SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Trade name: Velvetol® H2000

Product code: 000000000000281825

Substance name: 1,3-propanediol, homo polymer

CAS-No.: 345260-48-2

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

Use of the Substance/Mixture: Textile auxiliary, Cosmetic additive, Film preservatives

1.3 Details of the supplier of the safety data sheet

Company: Allessa GmbH

Alt-Fechenheim 34

60386 Frankfurt am Main

Germany

Telephone: +49 69 4109 01

Telefax: +49 69 4109 2100

Responsible/issuing person: +49 69 4109 2710

sdb@allessa.com

1.4 Emergency telephone number

Telephone: 24-7 Emergency Advice Europe

+49 69 22222571

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture according to the Globally Harmonised System (GHS).

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture according to the Globally Harmonised System (GHS).

2.3 Other hazards

None known.
SECTION 3: Composition/information on ingredients

3.1 Substances

<table>
<thead>
<tr>
<th>Substance name</th>
<th>1,3-propanediol, homo polymer</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS-No.</td>
<td>345260-48-2</td>
</tr>
<tr>
<td>Chemical nature</td>
<td>Polymer</td>
</tr>
<tr>
<td>Remarks</td>
<td>Contains no hazardous ingredients according to GHS</td>
</tr>
</tbody>
</table>

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice: If symptoms persist, call a physician.

If inhaled: If breathed in, move person into fresh air.

In case of skin contact: Wash off immediately with soap and plenty of water.

In case of eye contact: Immediately flush eye(s) with plenty of water.

If swallowed: Rinse mouth with water. Get medical attention if symptoms occur.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms: No symptoms known currently.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment: Elementary aid, decontamination and symptomatic treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media: Alcohol-resistant foam
Dry powder
Carbon dioxide (CO2)
Water spray jet

Unsuitable extinguishing media: High volume water jet
5.2 Special hazards arising from the substance or mixture

Specific hazards during firefighting: Hazardous decomposition products formed under fire conditions.

Hazardous combustion products: Carbon dioxide (CO2) Carbon monoxide

5.3 Advice for firefighters

Special protective equipment for firefighters: Wear self-contained breathing apparatus and protective suit.

Further information: Standard procedure for chemical fires. In the event of fire and/or explosion do not breathe fumes. Use water spray to cool unopened containers. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. Prevent further leakage or spillage if safe to do so. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Please observe escape and rescue routes!

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions: Wear personal protective equipment. Unprotected persons must be kept away. Avoid contact with skin, eyes and clothing. The danger areas must be delimited and identified using relevant warning and safety signs.

6.2 Environmental precautions

Environmental precautions: Avoid release to the environment. Prevent spreading over a wide area (e.g. by containment or oil barriers). Retain and dispose of contaminated wash water.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up: Soak up with inert absorbent material. Keep in suitable, closed containers for disposal. Large spills should be collected mechanically (remove by pumping) for disposal. Containers in which spill substance has been collected must be adequately labelled Clean contaminated floors and objects thoroughly while observing environmental regulations. Dispose of absorbed material in accordance with the regulations.
6.4 Reference to other sections
For personal protection see section 8.

SECTION 7: Handling and storage

7.1 Precautions for safe handling
Advice on safe handling: Handle in accordance with good industrial hygiene and safety practice.
Wear personal protective equipment.
Do not breathe vapours or spray mist.
Avoid contact with skin, eyes and clothing.

Advice on protection against fire and explosion: Normal measures for preventive fire protection.
The product is flammable but not readily ignited.
Keep away from heat and sources of ignition.
Take measures to prevent the build up of electrostatic charge.

Hygiene measures: General industrial hygiene practice.
Keep away from food and drink.
Avoid contact with skin, eyes and clothing.
Contaminated work clothing should not be allowed out of the workplace.
Wash hands before breaks and at the end of workday.
Please thoroughly clean and care for the skin after finishing work.
Follow the skin protection plan.

7.2 Conditions for safe storage, including any incompatibilities
Requirements for storage areas and containers: Keep containers tightly closed in a cool, well-ventilated place.
Store in original container.
Keep away from heat and sources of ignition.
Keep under nitrogen.

Advice on common storage: Do not store or transport together with foodstuffs

7.3 Specific end use(s)
Specific use(s): Not relevant

SECTION 8: Exposure controls/personal protection

8.1 Control parameters
We are not aware of any national exposure limit.

8.2 Exposure controls
Engineering measures
Provide sufficient air exchange and/or exhaust in work rooms.

Personal protective equipment
Eye protection : Depending on the risk, wear sufficient eye protection (safety glasses with side protection or goggles, and if necessary, face shield.)

Hand protection

Material : Suitable:

Material : butyl-rubber
Break through time : > 480 min
Glove thickness : 0,45 mm

Material : Nitrile rubber
Break through time : > 480 min
Glove thickness : 0,5 mm

Remarks : Choose gloves to protect hands against chemicals depending on the concentration and quantity of the hazardous substance and specific to place of work.
The selected protective gloves have to satisfy the specifications of Regulation (EU) 2016/425 and the standard EN 374 derived from it.
Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact).
Gloves must be inspected prior to use.
Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.
Gloves must be rinsed thoroughly after use.

Skin and body protection : Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place, e.g. apron, boots, protective suit (EN 14605, EN ISO 13982-1, EN 13034).

Respiratory protection : No personal respiratory protective equipment normally required.

Protective measures : Avoid contact with the skin and the eyes.
Do not breathe gas/fumes/vapour/spray.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties
<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>liquid</td>
</tr>
<tr>
<td>Colour</td>
<td>clear</td>
</tr>
<tr>
<td>Odour</td>
<td>weak</td>
</tr>
<tr>
<td>Odour Threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>No data available</td>
</tr>
<tr>
<td>Melting point</td>
<td>16 - 18 °C</td>
</tr>
<tr>
<td>Initial boiling point and boiling range</td>
<td>No data available</td>
</tr>
<tr>
<td>Flash point</td>
<td>&gt; 200 °C</td>
</tr>
<tr>
<td>Method</td>
<td>Tag open cup</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Upper explosion limit / Upper flammability limit</td>
<td>No data available</td>
</tr>
<tr>
<td>Lower explosion limit / Lower flammability limit</td>
<td>No data available</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative vapour density</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative density</td>
<td>No data available</td>
</tr>
<tr>
<td>Density</td>
<td>1,016 g/cm³ (40 °C)</td>
</tr>
<tr>
<td>Solubility(ies)</td>
<td></td>
</tr>
<tr>
<td>Water solubility</td>
<td>slightly soluble</td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water</td>
<td>No data available</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>&gt; 200 °C</td>
</tr>
<tr>
<td>Heating rate: 10 K/min</td>
<td></td>
</tr>
<tr>
<td>Viscosity</td>
<td></td>
</tr>
<tr>
<td>Viscosity, dynamic</td>
<td>750 - 900 mPa.s (40 °C)</td>
</tr>
<tr>
<td>Viscosity, kinematic</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>On the basis of the chemical structure of the substance it can be assumed that the substance is not an explosion hazard.</td>
</tr>
</tbody>
</table>
The substance has no chemically unstable or highly reactive groups that could lead to an explosion.

Oxidizing properties: On the basis of the chemical structure of the substance it may be assumed that the substance has no oxidising properties. The substance has no functional groups that could have an oxidising effect.

9.2 Other information

Flammability (liquids): No data available
Surface tension: No data available
Molecular weight: 1.900 - 2.100 g/mol
Self-ignition: No data available

SECTION 10: Stability and reactivity

10.1 Reactivity
No dangerous reaction known under conditions of normal use.

10.2 Chemical stability
Decomposes on heating.

10.3 Possibility of hazardous reactions
Hazardous reactions: May form explosive peroxides.

10.4 Conditions to avoid
Conditions to avoid: No conditions to be specially mentioned.

10.5 Incompatible materials
Materials to avoid: Strong oxidizing agents

10.6 Hazardous decomposition products
No decomposition if used as directed.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Product:
Acute oral toxicity: LD50 (Rat): > 2.000 mg/kg
Acute inhalation toxicity: No data available
Acute dermal toxicity: No data available

Skin corrosion/irritation

Product:
Species: Rabbit
Result: No skin irritation

Serious eye damage/eye irritation

Product:
Species: rabbit eye
Result: No eye irritation

Respiratory or skin sensitisation

Product:
Species: Guinea pig
Result: Did not cause sensitisation on laboratory animals.

Germ cell mutagenicity

Product:
Germ cell mutagenicity - Assessment: In vitro tests did not show mutagenic effects

Carcinogenicity

Product:
Carcinogenicity - Assessment: No data available

Reproductive toxicity

Product:
Reproductive toxicity - Assessment: No data available

STOT - single exposure

Product:
No data available

STOT - repeated exposure

Product:
No data available
Aspiration toxicity

**Product:**
No aspiration toxicity classification

Further information

**Product:**
Information given is based on data obtained from similar substances.

SECTION 12: Ecological information

12.1 Toxicity

**Product:**
- **Toxicity to fish**: LC50 (Oncorhynchus mykiss (rainbow trout)): > 120 mg/l
  - Exposure time: 96 h
- **Toxicity to daphnia and other aquatic invertebrates**: EC50 (Daphnia magna (Water flea)): 102 mg/l
  - Exposure time: 48 h
- **Toxicity to algae**: ErC50 (Pseudokirchneriella subcapitata (green algae)): > 120 mg/l
  - Exposure time: 72 h

12.2 Persistence and degradability

**Product:**
- **Biodegradability**: Result: Inherently biodegradable.
  - Result: According to the results of tests of biodegradability this product is not readily biodegradable.

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

**Product:**
- **Assessment**: Not required.

12.6 Other adverse effects

**Product:**
SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product: If recycling is not practicable, dispose of in compliance with local regulations. Dispose of contents/ container to an approved waste disposal plant.

Contaminated packaging: Packaging that cannot be cleaned should be disposed of as product waste. Empty containers should be taken to an approved waste handling site for recycling or disposal. Dispose of in accordance with local regulations.

SECTION 14: Transport information

14.1 UN number
Not regulated as a dangerous good

14.2 UN proper shipping name
Not regulated as a dangerous good

14.3 Transport hazard class(es)
Not regulated as a dangerous good

14.4 Packing group
Not regulated as a dangerous good

14.5 Environmental hazards
Not regulated as a dangerous good

14.6 Special precautions for user
Not applicable

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code
Not applicable for product as supplied.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
Not applicable
Volatile organic compounds : Law on the incentive tax for volatile organic compounds (VOCV)
Volatile organic compounds (VOC) content: 0 %
According to the composition the product contains no VOC component as defined by the Swiss VOC Law

Other regulations:
Take note of Dir 94/33/EC on the protection of young people at work.
Take note of Dir 92/85/EEC on the safety and health at work of pregnant workers.
The product does not need to be labelled in accordance with EC directives or respective national laws.

The components of this product are reported in the following inventories:
REACH : Product falls under the EU-polymer definition., The monomers for this polymer have been notified.
TSCA : All chemical substances in this product are either listed on the TSCA Inventory or are in compliance with a TSCA Inventory exemption.
CH BAGREG : This polymer contains monomers listed on the Swiss Inventory.
DSL : On the inventory, or in compliance with the inventory
NDSL : Not applicable
IECSC : On the inventory, or in compliance with the inventory
TCSI : On the inventory, or in compliance with the inventory
ENCS : Not in compliance with the inventory
KECI : Not in compliance with the inventory
AICS : Not in compliance with the inventory
PICCS : Not in compliance with the inventory
NZIoC : Not in compliance with the inventory

15.2 Chemical safety assessment
A Chemical Safety Assessment is not required for this substance.

SECTION 16: Other information

Full text of other abbreviations
Further information

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.