

Section 1: Identification of the Substance or Mixture and of the Company

1.1 **Product identifier**

Tradename / Designation: D-Psicose (Allulose)

Index-No.:

EC-No.:

CAS-No.: 551-68-8

REACH-Registration No.:

A registration number is not available for this substance as the substance or its uses are exempted from registration according to article 2 REACH Regulation (EC) No. 1907/2006, or the annual tonnage does not require a registration or the registration is envisaged for al later registration date.

Other means of identification: none

1.2 Relevant identified uses oft he substance or mixture and uses advised against:

Relevant identified uses: Food, sweeteners for the food industry, raw material for the chemical industry.

Uses advised against: No further relevant information available.

1.3 Details of the supplier of the safety data sheet

Manufacturer / Supplier Savanna Ingredients GmbH

Street / P.O. Box Duerener Strasse 67

Country Code / Postal code / Town D-50189 Elsdorf

Contact for product information Dep.: Occupational Safety Distributed by: Palmer Holland, Inc. 191 American Blvd, Suite 300 Westlake, OH 44145

Emergency Telephone No.: Palmer Holland: 800-635-4822 Chemtrec: 800-424-9300



Material Safety Data Sheet

according to Regulation (EC) No. 1907/2006

Telephone / E-Mail

+49 2274 701 419 E-Mail: florian.kipping@pfeifer-langen.com

Contact for product information Dep.: Quality

Telefon / E-Mail

+49 2274 701 480 E-Mail: quality@savanna-ingredients.com

Emergency telephone 1.4

Poison Control Centers in every country.

Section 2: Hazards Identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 - Not a dangerous substance according to GHS / CLP Regulation

2.2 Label elements

does not require labeling.

Classification according to Regulation (EC) No. 1272/2008 (CLP)

Pictogram: not applied Signal word: not applied

Hazardous ingredients for labeling: none

Hazard information: Dust can form explisive mixtures with air.

Safety instructions: Avoid the accumulation of dust and the development of sparks.

2.3 Other Hazards:

Flammable.

Section 3: Composition / Information on Ingredients

Chemical substances 3.1

Substance name: D-Psicose EC-No.: CAS-No.: 551-68-8 Index-No.: Reach-Registration No.: N/A



Synonyms: Allulose

Share: 100 % Classification according to Regulation (EC) No. 1272/2008: Not classified.

Section 4: Potential Health Effects

4.1 **Description of first-aid measure**

Inhalation: If symptoms occur, remove to fresh air. Get medical attention if the symptoms persist.

Skin Contact: Wash the skin with soap and water. Seek medical attention immediately if symptoms persist after washing.

Eye Contact: Material that get in contact with the eyes must be washed out immediately with water. Remove contact lenses if possible. Seek medical attention if symptoms persist after washing.

If swallowed (large quantities): Rinse mouth with water and drink plenty of water. Call a medical doctor if syptoms persist.

4.2 Most important symptoms and effects, both acute and delayed

Dust can irritate the eyes and respiratory system.

4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

Section 5: Firefighting Measures

5.1 Extinguishing media

Suitable: water spray, alcohol-resistant foam, dry chemical powder Unsuitable: CO₂, high pressure waterjet.

5.2 Special hazards arising from the substance or mixture

Substance is flammable. Dust can form explosive mixtures with air. Through thermal decomposition developement of carbon monoxide, carbon dioxide, soot and other organic products.



5.3 Advice for firefighters

In case of fire wear self-contained breathing apparatus. Isolate fire, evacuate all personell. Fire-fighting equipment must be kept available. Do not allow fire extinguishing water to reach ground water, water course or sewage system.

Keep away from sources of ignition (for example open flames, heat sources and sparks).

Section 6: Accidental Release Measures

6.1 **Personal precautions, protective equipment and emergency procedures**

Avoid inhalation of dust. Use dust mask. Pick up mechanically, avoiding dust formation. Take up dry. Wear protective equipment. Keep unprotected persons away. Clear up danger zones. Procedure according tot he emergency plan.

6.2 Enviromental precautions

Do not allow to enter sewers, surface or ground water.

6.3 Methods and material for containment and cleaning up

Pick up mechanically, dust-free and place in suitable containers for disposal. Use approved industrial vacuum cleaner to pick up. Use spark-proof tools.

6.4 **Reference to other sections**

Information for safe handling see section 7. Information regarding personal protective equipment see section 8.

Section 7: Handling and Storage

7.1 **Precautions for safe handling**

Observe standard commercial hygiene measures. Avoid dust formation. Dust deposits must be removed regularly. Use tested industrial vacuum cleaners or suction for hazardous areas.



Observe emission limit values, if necessary, use exhaust air purification. Containers or packaging must be clearly labeled.

Measures to protect against fire and explosions

Take precautionary measures against electrostatic charging. Areas where the substance in powder form can occur in such quantities, that the possibility of a dust explosion consists, are considered as explosive area. Keep away from sources of ignition (for example open flames, heat sources and sparks).

Do not smoke.

Further information: NFPA 654, Standard for the Prevention of Fire and Dust Explosions from the Manufacturing, Processing, and Handling of Combustible Particulate Solids, for safe handling.

Measures to prevent dusts and aerosols

Keep container tightly closed.

7.2 Conditions for safe storage, including any incompatibilities

Information on storage conditions: Keep container tightly closed.

Requirements for storage rooms and containers

Keep in a dry and cool place; keep well closed after use.

Maximum storage temperature: Recommended storage temperature: room temperature Storage class VCI: 11

7.3 Specific end use(s)

Industry and sector-specific guidelines: No further relevant information available.

Sector 8: Exposure Controls / Personal Protection

8.1 **Control parameters**

Occupational exposure limits in the workplace and / or biological limit values Occupational Exposure Limits (OEL) (Germany)

Contains no substances with occupational exposure limit values.



8.2 Limitation and monitoring of exposure

Appropriate engineering controls

Technical measures and appropriate working operations should be given priority over the use of personal protective equipment. Ensure ventilation, especially in closed rooms.

General safety and hygienic measures

The usual precautionary measures for handling of substances (basic, raw materials, food, chemicals, etc.) must be observed. Avoid dust formation. Wash hands before breaks and at the end of work.

Individual protection measures

Personal protective equipment must be selected in accordance with the applicable CEN standards and in consultation with the personal protective equipment supplier. Due to the electrostatic charge suitable work clothing and shoes must be worn.

Respiratory protection:



Particle mask P1.

Eye / Face protection:



Tightly sealed googles.

Skin protection:



Wash and lotion for hands and face after working.

Hands protection:



Wear suitable protective gloves.

Delimitation and monitoring of the environmental exposition:

Avoid release to the environment. Do not empty into drains.



Material Safety Data Sheet according to Regulation (EC) No. 1907/2006

Section 9: Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Section 10: Stability and Reactivity

10.1 Reactivity

No further relevant information available.

10.2 Chemical stability

The product is chemically stable under standard ambient conditions (temperature).

10.3 **Possibility of hazardous reactions**

No decomposition if used according to specifications.

10.4 **Conditions to avoid**

Strong heating. Incompatible materials. Minimize the formation and accumulation of dust.



10.5 **Incompatible materials**

Strong oxidizing agents.

10.6 Hazardous decomposition products

Carbon monoxide, carbon dioxide, soot and other organic products.

Section 11: Toxicological Information

11.1 Information on toxicological effects

no data available

Section 12: Ecological Information

12.1 Toxicity

Aquatic Toxicity: no data available.

12.2 Persistence and degradability

The product is biodegradable and does not pose an environmental hazard. It should be disposed of in a responsible manner.

12.3 Results of PBT and vPvB assessment

not required.

12.4 Other adverse effects

Do not flush into surface water, wastewater or soil. The entry into the environment must be avoided.

Section 13: Disposal Considerations

13.1 Waste treatment methods

Recommendation:

Product residues should be disposed of in compliance with the Directive on waste 2008/98 / EC as well as national and reginal regulations.

Treatment of contaminated packaging Disposal according to official regulations.



Section 14: Transport Information

Not dangerous substance according to applicable transport conditions.

14.1 UN-Number

not available.

14.2 UN proper shipping name

not available.

ADR / RID

not available

IMDG-Code / ICAO-TI / IATA-DGR

not available.

14.3 Transport hazard class(es)

not applicable.

14.4 Packing group

not available.

14.5 Environmental hazards

Labels environmentally hazardous substances

ADR/RID / IMDG-Code / ICAO-TI / IATA-DGR: no Marine Pollutant: no

14.6 Special precautions for user

not applicable.

14.7 Bulk according to Annex II of MARPOL 73/78 and the IBC Code

not applicable.



Material Safety Data Sheet

according to Regulation (EC) No. 1907/2006

Section 15: Regulatory Information

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

The product is not classified according to the CLP-regulation.

National Regulations

Water hazard class: WGK 1 (assessment by list): slightly hazardous for water

Labelling according to EU: Product does not require labeling.

Other regulations, limitations and prohibitive regulations

Observe employment restrictions under 94/33/EC and Dir 92/85/EEC.

Section 16: 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.

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

IATA: International Air Transport Association

GHS: Globally Harmonized System of classification and labelling of chemicals CAS: Chemical Abstracts Service (devision of the American Chemical Society) GefStoffV: Gefahrstoffverordnung (Ordinance on Hazardous Substances, Germany) LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent

Training for workers

An adequate information and training for operators / employees has to be ensured through training based on the MSDS and the operating instructions.

Further information can be obtained from the manufacturer

Adress s. 1.3 Dep. Occupational Safety Contact: Mr. Kipping