

Safety data sheet

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BASF Safety data sheet according to the United Nations' Globally Harmonized System (UN GHS)

Date / Revised: 08.05.2024

Version: 2.1

Product: **LuquaSorb® M1**

(ID no. 30847794/SDS_GEN_00/EN)

Date of print 22.05.2024

1. Identification

Product identifier

LuquaSorb® M1

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

Relevant identified uses: Polymer

Recommended use: Superabsorbent polymer

Not recommended use: Not intended for sale to or use by the general public.

Details of the supplier of the safety data sheet

Company:

BASF CORPORATION

100 Park Avenue

Florham Park, NJ 07932, USA

Telephone: +1 973 245-6000

Emergency telephone number

International emergency number:

Telephone: +49 180 2273-112

2. Hazards Identification

Classification of the substance or mixture

According to UN GHS criteria

No need for classification according to GHS criteria for this product.

Label elements

Globally Harmonized System (GHS)

The product does not require a hazard warning label in accordance with GHS criteria.

Other hazards

According to UN GHS criteria

No specific dangers known, if the regulations/notes for storage and handling are considered.

3. Composition/Information on Ingredients

Substances

Not applicable

Mixtures

Chemical nature

polyacrylic acid, sodium salt, crosslinked

Hazardous ingredients (GHS)

According to UN GHS criteria

2-Propenoic acid, homopolymer, sodium salt

Content (W/W): 95 % - < 100 %

CAS Number: 9003-04-7

4. First-Aid Measures

Description of first aid measures

Remove contaminated clothing.

If inhaled:

If difficulties occur after dust has been inhaled, remove to fresh air and seek medical attention.

On skin contact:

Wash thoroughly with soap and water

On contact with eyes:

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Wash affected eyes for at least 15 minutes under running water with eyelids held open.

On ingestion:

Rinse mouth and then drink 200-300 ml of water.

Most important symptoms and effects, both acute and delayed

Symptoms: (Further) symptoms and / or effects are not known so far

Indication of any immediate medical attention and special treatment needed

Treatment: Treat according to symptoms (decontamination, vital functions), no known specific antidote.

5. Fire-Fighting Measures

Extinguishing media

Suitable extinguishing media:
water spray, dry powder, foam

Unsuitable extinguishing media for safety reasons:
carbon dioxide, water jet

Additional information:

Avoid whirling up the material/product because of the danger of dust explosion.

Special hazards arising from the substance or mixture

Dust explosion hazard.

Advice for fire-fighters

Special protective equipment:
Wear a self-contained breathing apparatus.

Further information:

Contaminated extinguishing water must be disposed of in accordance with official regulations. The degree of risk is governed by the burning substance and the fire conditions.

6. Accidental Release Measures

Forms slippery surfaces with water.

Personal precautions, protective equipment and emergency procedures

Breathing protection required. Avoid dust formation.

Environmental precautions

Do not discharge into drains/surface waters/groundwater.

Methods and material for containment and cleaning up

For large amounts: Contain with dust binding material and dispose of.

Dispose of in accordance with national, state and local regulations.

7. Handling and Storage

Precautions for safe handling

Handle in accordance with good industrial hygiene and safety practice.

Breathing must be protected when large quantities are decanted without local exhaust ventilation.
Avoid the formation and deposition of dust.

Protection against fire and explosion:

The granulate is not capable of a dust explosion. The product contains combustible polymers. The product is not easily combustible and also not self combustible. Accumulation of fine dust may entail the risk of a dust explosion in the presence of air. Avoid whirling up the material/product because of the danger of dust explosion.

Dust explosion class: Dust explosion class 1 (Kst-value >0 up to 200 bar m s-1).

Conditions for safe storage, including any incompatibilities

Further information on storage conditions: Keep container dry because product takes up the humidity of air.

The packed product is not damaged by low temperatures or by frost.

The packed product will not be damaged by high temperatures.

8. Exposure Controls/Personal Protection

Exposure controlsPersonal protective equipment

Respiratory protection:

Suitable respiratory protection for higher concentrations or long-term effect: Particle filter with high efficiency for solid and liquid particles (e.g. EN 143 or 149, Type P3 or FFP3).

Hand protection:

nitrile coated cotton gloves (e.g. EN 388, 374)

Eye protection:

Safety glasses with side-shields (frame goggles) (e.g. EN 166)

Body protection:

No body protection required if used for intended purpose and satisfying generally accepted industrial hygiene rules.

General safety and hygiene measures

Handle in accordance with good industrial hygiene and safety practice. Wearing of closed work clothing is recommended.

9. Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

State of matter:	solid
Form:	granules
Colour:	white to off-white
Odour:	almost odourless
Odour threshold:	No applicable information available.
glass transition temperature:	approx. 140 °C (approx. 101,3 hPa) The substance / product decomposes.
Flammability:	not flammable
Lower explosion limit:	100 g/m ³
Flash point:	not applicable
Auto-ignition temperature:	not determined
Thermal decomposition:	No decomposition if used as directed.
pH value:	approx. 6,0
Viscosity, kinematic:	not applicable, the product is a solid
Viscosity, dynamic:	not applicable, the product is a solid
Thixotropy:	not thixotropic
Solubility in water:	insoluble, only capable of swelling
Partitioning coefficient n-octanol/water (log K _{ow}):	not applicable
Vapour pressure:	not applicable
Relative density:	No data available.

9.2. Other information

Information with regard to physical hazard classes

Explosives

Explosion hazard: Product is not explosive, however a dust explosion could result from an air / dust mixture.

Oxidizing properties

Fire promoting properties: Based on its structural properties the product is not classified as oxidizing.

Other safety characteristics

Minimum ignition energy: > 1 J
Bulk density: approx. 700 kg/m³
Hygroscopy: hygroscopic
Evaporation rate: The product is a non-volatile solid.

10. Stability and Reactivity

Chemical stability

The product is stable if stored and handled as prescribed/indicated.

Possibility of hazardous reactions

The product is not a dust explosion risk as supplied; however the build-up of fine dust can lead to a risk of dust explosions.

Conditions to avoid

Avoid humidity.

Incompatible materials

Substances to avoid:
water

Hazardous decomposition products

Thermal decomposition products:
No hazardous decomposition products if stored and handled as prescribed/indicated.

11. Toxicological Information

Information on toxicological effects

Acute toxicity

Assessment of acute toxicity:
Virtually nontoxic after a single ingestion. Virtually nontoxic after a single skin contact.

Experimental/calculated data:
LD50 rat (oral): > 2.000 mg/kg

LD50 rat (dermal): > 2.000 mg/kg

Irritation

Assessment of irritating effects:
Not irritating to the skin. Not irritating to the eyes. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Experimental/calculated data:
Skin corrosion/irritation rabbit: non-irritant (OECD Guideline 404)

Serious eye damage/irritation rabbit: non-irritant (OECD Guideline 405)

Respiratory/Skin sensitization

Assessment of sensitization:

No sensitizing effect. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Experimental/calculated data:

No sensitizing effect.

Germ cell mutagenicity

Assessment of mutagenicity:

Based on available data, the classification criteria are not met.

Carcinogenicity

Assessment of carcinogenicity:

A chronic (2-year) lifetime inhalation study in rats with respirable superabsorber polymer dust (micronized to < 10 µm diameter) resulted in a non-specific inflammatory response in the lungs followed by tumor development in some rats in the highest chronic exposure level of 0.8 mg/m³. In the absence of chronic inflammation, tumours are not expected. A safe working level of 0.05 mg/m³ has been established for respirable superabsorbent polymer dust (< 10 µm diameter) by the German MAK commission.

Reproductive toxicity

Assessment of reproduction toxicity:

Based on available data, the classification criteria are not met.

Developmental toxicity

Assessment of teratogenicity:

Based on available data, the classification criteria are not met.

Other relevant toxicity information

The statement was derived from products of similar composition.

12. Ecological Information

Toxicity

Assessment of aquatic toxicity:

There is a high probability that the product is not acutely harmful to aquatic organisms.

Toxicity to fish:

LC50 (96 h) > 100 mg/l, *Brachydanio rerio* (OECD Guideline 203, static)

Aquatic invertebrates:

EC50 (48 h) > 100 mg/l, *Daphnia magna* (OECD Guideline 202, part 1, static)

Aquatic plants:

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EC50 (72 h) > 100 mg/l, *Desmodesmus subspicatus* (OECD Guideline 201)
Nominal concentration.

Microorganisms/Effect on activated sludge:

The inhibition of the degradation activity of activated sludge is not anticipated when introduced to biological treatment plants in appropriate low concentrations.

Soil living organisms:

LC50 > 1.000 mg/kg, *Eisenia foetida* (OECD Guideline 207)

Persistence and degradability

Assessment biodegradation and elimination (H₂O):

The product is not very soluble in water and can thus be removed from water mechanically in suitable effluent treatment plants.

Bioaccumulative potential

Assessment bioaccumulation potential:

The product will not be readily bioavailable due to its consistency and insolubility in water.

Mobility in soil

Assessment transport between environmental compartments:

Volatility: The substance will not evaporate into the atmosphere from the water surface.

Adsorption in soil: Adsorption to solid soil phase is not expected.

Results of PBT and vPvB assessment

According to Annex XIV of Regulation (EC) No.1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH): The product does not contain a substance fulfilling the PBT (persistent/bioaccumulative/toxic) criteria or the vPvB (very persistent/very bioaccumulative) criteria. Self classification

Other adverse effects

The product does not contain substances that are listed in Regulation (EC) 1005/2009 on substances that deplete the ozone layer.

Additional information

Add. remarks environm. fate & pathway:

Due to the consistency of the product, dispersion into the environment is impossible. Therefore no negative effects on the environment may be anticipated based on the present state of knowledge.

Other ecotoxicological advice:

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Do not release untreated into natural waters. The ecotoxic effect of the product has not been tested.
The information on this was derived from products of similar structure or composition.

13. Disposal Considerations

Waste treatment methods

Must be disposed of or incinerated in accordance with local regulations.

A waste code in accordance with the European waste catalog (EWC) cannot be specified, due to dependence on the usage.

Observe national and local legal requirements.

Contaminated packaging:

Uncontaminated packaging can be re-used.

Packs that cannot be cleaned should be disposed of in the same manner as the contents.

14. Transport Information

Land transport

ADR

	Not classified as a dangerous good under transport regulations
UN number or ID number:	Not applicable
UN proper shipping name:	Not applicable
Transport hazard class(es):	Not applicable
Packing group:	Not applicable
Environmental hazards:	Not applicable
Special precautions for user	None known

RID

	Not classified as a dangerous good under transport regulations
UN number or ID number:	Not applicable
UN proper shipping name:	Not applicable
Transport hazard class(es):	Not applicable
Packing group:	Not applicable
Environmental hazards:	Not applicable
Special precautions for user	None known

Inland waterway transport

ADN

	Not classified as a dangerous good under transport regulations
UN number or ID number:	Not applicable
UN proper shipping name:	Not applicable
Transport hazard class(es):	Not applicable

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Packing group:	Not applicable
Environmental hazards:	Not applicable
Special precautions for user:	None known

Transport in inland waterway vessel

Not evaluated

Sea transport

IMDG

	Not classified as a dangerous good under transport regulations
UN number or ID number:	Not applicable
UN proper shipping name:	Not applicable
Transport hazard class(es):	Not applicable
Packing group:	Not applicable
Environmental hazards:	Not applicable
Special precautions for user	None known

Air transport

IATA/ICAO

	Not classified as a dangerous good under transport regulations
UN number or ID number	Not applicable
UN proper shipping name:	Not applicable
Transport hazard class(es):	Not applicable
Packing group:	Not applicable
Environmental hazards:	Not applicable
Special precautions for user	None known

Maritime transport in bulk according to IMO instruments

Maritime transport in bulk is not intended.

15. Regulatory Information**Safety, health and environmental regulations/legislation specific for the substance or mixture**

Not applicable

16. Other Information

Any other intended applications should be discussed with the manufacturer.

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