

Safety data sheet: **LITHIUM Densifier LD 44**

According to 1907/2006/EC, Article 31 *Interior & Exterior*

Inorganic binder for the consolidation and conservation of porous and artificial stone.

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

Product identifier

Trade name: **Lithium Densifier LD 44**

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

Application of the substance / the preparation

inorganic binder / adhesive for industrial applications

Details of the supplier of the safety data sheet

Manufacturer/Supplier:

isi GmbH

Ilgner – Schleif – Innovationen GmbH

D-51598 Friesenhagen - Steeg

Telefon 0049/2294/993818 - 0

Telefax 0049/2294/993818-30

Further information obtainable from: mail@ilgner-schleif-innovationen.com

Emergency telephone number: Tel.: 0049/30/19240

2 Hazards identification

Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008



GHS07

Eye Irrit. 2 H319 Causes serious eye irritation.

Classification according to Directive 67/548/EEC or Directive 1999/45/EC



Xi; Irritant

R36: Irritating to eyes.

Classification system:

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

Label elements

Labelling according to Regulation (EC) No 1272/2008

The substance is classified and labelled according to the CLP regulation.

Hazard pictograms



GHS07

Signal word Warning

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Hazard-determining components of labelling:

Silicic acid, lithium salt

Hazard statements

H319 Causes serious eye irritation.

Precautionary statements

P280 Wear protective gloves/protective clothing/eye protection/face protection.
P262 Do not get in eyes, on skin, or on clothing.
P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

3 Composition/information on ingredients

Description: Mixture of substances listed below with nonhazardous additions.

Dangerous components:

CAS: 12627-14-4	Silicic acid, lithium salt	25 - 50%
EINECS: 235-730-0	Xi R36	
	GHS07 Eye Irrit. 2, H319	

Additional information

For the wording of the listed risk phrases refer to section 16.

4 First aid measures

Description of first aid measures

General information Immediately remove any clothing soiled by the product.

After skin contact Immediately rinse with water.

After eye contact Rinse opened eye for several minutes under running water.

After swallowing

Rinse out mouth and then drink plenty of water.

Call a doctor immediately.

5 Firefighting measures

Extinguishing media

Suitable extinguishing agents

Product itself is not combustible; define extinguishing measures according to neighbouring conditions.

Advice for firefighters

Protective equipment: No special measures required.

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6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

Particular danger of slipping on leaked/spilled product.

Environmental precautions: Do not allow to enter sewers/ surface or ground 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 8 for information on personal protection equipment.

7 Handling and storage

Handling

Precautions for safe handling

No special precautions are necessary if used correctly.

Information about fire - and explosion protection: No special measures required.

Conditions for safe storage, including any incompatibilities Storage

Requirements to be met by storerooms and receptacles:

Provide alkali-resistant floor.

Do not use light alloy receptacles.

Suitable material for receptacles and pipes: steel or stainless steel.

Unsuitable material for receptacle: aluminium.

Unsuitable material for receptacle: glass or ceramic.

Unsuitable material for receptacle: zinc.

Information about storage in one common storage facility:

Do not store together with acids.

Further information about storage conditions: Protect from frost.

8 Exposure controls/personal protection

Additional information about design of technical facilities:

No further data; see item 7.

Control parameters

Ingredients with limit values that require monitoring at the workplace:

Not required.

Additional information: The lists valid during the making were used as basis.

Exposure controls

Personal protective equipment

General protective and hygienic measures

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

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Respiratory protection: Not required.

Protection of hands: Alkaline resistant gloves

Material of gloves

Natural Latex with small amount of polychloroprene Latex. (Lapren, Company KCL)

Penetration time of glove material

Value for the permeation: Level ³ 6

Indications are based on information by the producer of the gloves resp. literature or derived from similar substances by analogy.

Eye protection:



Tightly sealed goggles.

Body protection: Alkaline resistant protective clothing

9 Physical and chemical properties

Information on basic physical and chemical properties

General Information

Appearance:

Form:

Fluid

Colour:

Opaque

Odour:

Odourless

pH-value at 20°C:

ca. 12.5

Change in condition

Boiling point/Boiling range:

> 100°C

Flash point:

Not applicable

Self-igniting:

Product is not selfigniting.

Danger of explosion:

Product does not present an explosion hazard.

Density at 20°C:

ca. 1.26 g/cm³

Solubility in / Miscibility with Water:

Fully miscible

Viscosity:

dynamic at 20°C:

ca. 20

10 Stability and reactivity

Reactivity

Chemical stability

Thermal decomposition / conditions to be avoided:

No decomposition if used according to specifications.

Possibility of hazardous reactions

Strong exothermic reaction with acids

Reacts with light alloys to form hydrogen

Hazardous decomposition products: No dangerous decomposition products known

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11 Toxicological information

Information on toxicological effects

Acute toxicity:

LD/LC50 values relevant for classification:

12627-14-4 Silicic acid, lithiumsalt, mole ratio > 1,6 < 2,6

Oral LD50 > 2000 mg/kg (rat)

Primary irritant effect:

on the skin: Irritant to skin and mucous membranes.

on the eye: Strong irritant with the danger of severe eye injury.

Sensitization: No sensitizing effects known.

Additional toxicological information:

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version.

Irritant

12 Ecological information

Toxicity

Aquatic toxicity: No further relevant information available.

Persistence and degradability

Other information:

Readily eliminable from water.

Inorganic product; biotic degradation not applicable.

Ecotoxicological effects:

Remark: No toxicity after neutralization.

Behaviour in sewage processing plants:

The product is an alkaline solution. Neutralization is normally necessary before a waste water is discharged into sewage treatment plants.

Additional ecological information:

General notes:

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

13 Disposal considerations

Waste treatment methods

Recommendation

Can be disposed off with rubble after solidification following consultation with the waste disposal facility operator and the pertinent authorities and adhering to the necessary technical regulations.

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European waste catalogue

Waste catalogue numbers are to be defined according to EWC-Directive, specially for application sectors.

Uncleaned packaging:

Recommendation: Disposal must be made according to official regulations.

Recommended cleansing agents: Water, if necessary together with cleansing agents.

14 Transport information

Land transport ADR/RID (cross-border)

ADR/RID class: ---

Maritime transport IMDG: ---

IMDG Class: ---

Marine pollutant: **No**

Air transport ICAO-TI and IATA-DGR: ---

ICAO/IATA Class: ---

UN "Model Regulation": ---

Special precautions for user **Not applicable.**

15 Regulatory information

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

National regulations

Water hazard class: water hazard class 1: slightly hazardous for water

Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

The product is designed exclusively for professional/industrial application (see product information). This information is based on our level of knowledge and relates to the product in the state in which it is delivered. It is intended to describe our products from the point of view of safety requirements and is not intended to guarantee any particular properties.

Relevant phrases

H319 Causes serious eye irritation.

R36 Irritating to eyes.

Department issuing MSDS: Laboratory

Contact: Thomas Ilgner / Anis Saad

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)

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organization

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

LC50: Lethal concentration, 50 percent