

## **Safety data sheet: Pore Filler PFD 71**

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

### **Inorganic hardner and filler based on special alkali silicate**

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

**Product details:**

Trade name: **Pore Filler Densifier PFD 71**

Registration number Lithium and Silicic acid, sodium salt: 01-2119448725-31-0004

**Application of the substance / the preparation**

inorganic binder / adhesive for industrial applications

**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](mailto:mail@ilgner-schleif-innovationen.com)

Information in case of emergency: Tel.: 0049/30/19240

#### **2 Hazards identification**

**Classification of the substance or mixture**

Classification according to Regulation (EC) No 1272/2008 Void

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

not applicable

**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

Hazard pictograms Void

Signal word Void

Hazard-determining components of labelling: Void

Hazard statements Void

**Labelling according to EU guidelines:**

The product is not subject to identification regulations under EU Directives and the Ordinance on Hazardous Materials (German GefStoffV).

The classification is based on available toxicological data.

Observe the general safety regulations when handling chemicals

#### **3 Composition/information on ingredients**

**Chemical characterization**

Description: Mixture of substances listed below with nonhazardous additions.

**Dangerous components:**

CAS: 1344-09-8

Silicic acid, sodium salt, mol ratio > 3,2 < 40%

EINECS: 215-687-4

Lithium > 3,2 < 63%

**Additional information**

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

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### **4 First aid measures**

**General information** No special measures required.

**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**

**Suitable extinguishing agents**

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

**Protective equipment:** No special measures required.

### **6 Accidental release measures**

**Person-related safety precautions:**

Particular danger of slipping on leaked/spilled product.

**Measures for environmental protection:**

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

**Measures for cleaning/collecting:**

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

**Additional information:**

See Section 8 for information on personal protection equipment.

### **7 Handling and storage**

**Handling**

**Information for safe handling:** Avoid contact with eyes, skin and clothing.

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

**Storage**

**Requirements to be met by storerooms and receptacles:**

Do not use light alloy receptacles.

Unsuitable material for receptacle: aluminium.

Unsuitable material for receptacle: glass or ceramic.

Unsuitable material for receptacle: zinc.

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

**Information about storage in one common storage facility:**

Do not store together with acids.

**Further information about storage conditions:** Protect from frost.

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### **8 Exposure controls/personal protection**

#### **Additional information about design of technical facilities:**

No further data; see item 7.

#### **Ingredients with limit values that require monitoring at the workplace:**

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

#### **DNELs**

Lithium and Silicic acid, sodium salt:

DNEL dermal - workers, long-term = 1,59 mg/kg bw/d

DNEL inhalation - workers, long-term = 5,61 mg/kg bw/d

DNEL dermal - general population, long-term = 0,80 mg/kg bw/d

DNEL inhalation - general population, long-term = 1,38 mg/kg bw/d

DNEL oral - general population, long-term = 0,80 mg/kg bw/d

#### **PNECs**

Lithium and Silicic acid, sodium salt:

PNEC aqua - freshwater = 7,5 mg/l

**Additional information: Exposure scenario: see Annex**

#### **Personal protective equipment**

##### **General protective and hygienic measures**

The usual precautionary measures are to be adhered to when handling chemicals.

**Respiratory protection: Not required.**

**Protection of hands: Alkaline resistant gloves**

##### **Material of gloves**

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

The indications are based on own tests, literature data or informations from glove manufacturers or derived by analogy from similar substances.

**Penetration time of glove material Value for the permeation: Level <sup>3</sup> 6**

**Eye protection: Safety glasses**

### **9 Physical and chemical properties**

#### **General Information**

##### **Appearance:**

**Form:**

**Colour:**

**Odour:**

**Change in condition Boiling point/Boiling range:**

**Flash point:**

**Self-igniting:**

**Danger of explosion:**

**Density at 20°C:**

**Solubility in / Miscibility with Water:**

**Fluid**

**Colourless**

**Odourless**

**> 100°C**

**Not applicable**

**Product is not selfigniting.**

**Product does not present an explosion hazard.**

**ca. 1.37 g/cm<sup>3</sup>**

**Fully miscible**

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pH-value (100 g/l) at 20°C:		ca. 11.3
Viscosity:	dynamic at 20°C:	ca. 100 mPas
Solvent content:	Organic solvents:	0.0 %

### 10 Stability and reactivity

**Thermal decomposition / conditions to be avoided:**

No decomposition if used according to specifications.

**Materials to be avoided:**

**Dangerous reactions**

Strong exothermic reaction with acids

Reacts with light alloys to form hydrogen

**Dangerous decomposition products: No dangerous decomposition products known**

### 11 Toxicological information

**Acute toxicity:**

**LD/LC50 values relevant for classification:**

**1344-09-8 Lithium and Silicic acid, sodium salt, mol ratio > 3,2**

Oral LD 50 > 2000 mg/kg (rat)

**Primary irritant effect:**

**on the skin: slightly irritant**

**on the eye: slightly irritant**

**Sensitization: No sensitizing effects known.**

**Additional toxicological information:**

The product is not subject to classification according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version.

When used and handled according to specifications, the product does not have any harmful effects to our experience and the information provided to us.

### 12 Ecological information

**Information about elimination (persistence and degradability):**

**Other information:**

Readily eliminable from water.

Inorganic product; biotic degradation not applicable.

**Ecotoxicological effects:**

**Acquatic toxicity:**

**1344-09-8 Lithium and Silicic acid, sodium salt, mol ratio > 3,2**

EC 50 / 48h > 1000 mg/l (Daphnie)

LC 50 / 96h > 1000 mg/l (Brachydanio rerio)

**Remark: No toxicity after neutralization.**

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### **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.

## **13 Disposal considerations**

### **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.

### **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,,: ---

## **15 Regulatory information**

**Chemical safety assessment A Chemical Safety Assessment has been carried out.**

### **National regulations**

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

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### **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.

**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)

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

**\* Data compared to the previous version altered.**