

**1. Identification of the substance/mixture and of the company/undertaking****1.1 Product identifier**

Trade name / designation

**Liapor<sup>®</sup>**  
**Liaperl<sup>®</sup>**  
**Liaflor<sup>®</sup>**  
**Liadrain<sup>®</sup>****Other means of identification**Expanded clay,  
crushed expanded clay, lightweight sand**1.2 Relevant identified uses of the substance or mixture advised against****1.2.1 Relevant identified uses**

**Liapor<sup>®</sup>** Insulating ingredients for lightweight construction materials,  
embankment material  
crushed: lightweight sand, road grit

**Liaperl<sup>®</sup>** Filter materials for waste gas and wastewater treatment, ponds, etc.

**Liaflor<sup>®</sup>** Mineral substrates, hydroponics, etc.

**Liadrain<sup>®</sup>** Crushed material, e.g. vegetation substrates for landscaped roofing

**1.2.2 Uses advised against**

unknown

**1.3 Details of the supplier of the data sheet**

Supplier/Manufacturer

Liapor GmbH & Co. KG  
Industriestraße 2  
D-91352 Hallerndorf-Pautzfeld**Information contact**

+49 95 45 4 48-0

E-Mail (competent person)

[info@liapor.com](mailto:info@liapor.com)**1.4 Emergency Telephone Number**

+49 (0)30 30686 790

**2. Hazards Identification****2.1 Classification according to Regulation (EC) No 12/2008 [CLP/GHS]** none**2.1.1 Classification according to 67/548/EEC or 1999/45/EC** none**2.1.2 Additional information**

No information available for acute dermal or inhalative toxicity

**2.2 Labelling elements**

none

Not classified as PBT or vPvB.

**2.3 Supplemental hazard information (EU):**

Avoid dust emission, respect max. exposure limit, see chapter 8.1

Not classified in PBT or vPvB.

Product contains crystalline quartz.

Respirable dust from this product, if inhaled repeatedly or over a long period, could be a health hazard for the lungs (silicosis). Respirable quartz dust &lt; 10 % STOT RE; 2 H 373

(Full text of R-, H- and EUH-phrases: see section 16.)

**3. Composition /Information on Ingredients****3.1 Substances** none**3.2 Mixtures, products**Composition Alumo-Ferro, Calcium-silicates > 80 %  
Quartz < 20 %**3.3 Registration Numbers**

Name	CAS-Number	EINECS-Number	EU Classification	Content
(Al, Fe, Ca)-Silikate	1302-76-7	none	Not classified	> 80 %
Quartz	14808-60-7	238-878-4	Not classified	< 20 %

**4. First Aid Measures****4.1 Description of first aid measures**

General information: Avoid dust formation.  
Exposure to dust may lead to local and temporary irritation

- inhalation (dust) Remove victim to fresh air  
- skin contact (dust) Remove dusty cloths, wash with soap and water  
- eye contact (dust) Gently flush with plenty of water, remove contact lenses  
(unlikely exposition path)  
- ingestion Flush mouth with water (do not swallow),  
drink subsequently water

**5. Fire-Fighting Measures****5.1 Extinguishing media** no restrictions**5.2 Special hazards arising from the substance or mixture** none**5.3 Advice for fire-fighters**

Product itself does not burn. Co-ordinate fire-fighting measures to the fire surroundings.  
Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

**6. Accidental Release Measures****6.1 Personal precaution, protective equipment and emergency procedures**

Protective equipment (dust): Safety shoes  
Safety goggles class 3121 (EN388)  
Safety gloves  
Safety mask P2

**6.2 Environmental precautions** none**6.3 Methods and material for containment and cleaning up**

Mechanical pick up, avoid dust formation  
Dust: vacuum cleaning preferred

## 7. Handling and Storage

### 7.1 Protective measures

#### **Aerosol and dust generation preventions**

Avoid dust formation, dust deposit or dust inhalation.  
Assure sufficient air flow through work place. Use exhaust system.  
If dust is created, wear P2 mask, safety glasses and gloves.

#### **Advice on general occupational hygiene**

Do not eat, drink nor smoke on working area.  
Wash hands after working.  
Remove dust mask in workplace and keep contaminated cloths separate from clean cloths

### 7.2 Conditions for safe storage, including incompatibilities

#### **Technical measures and storage conditions:**

Depending on application: Dry application, e.g. Liapor® for ready to use mortar  
Store in a dry place Storage class: 10-13  
Moist application, e.g. Liaperl®, Liadrain®  
Frost-free storage

### 7.3. Specific end uses

Do not exceed 1.5 bar air pressure in pneumatic conveying to avoid excessive dust formation.

## 8. Exposure controls / Personal Protection

### 8.1 Control parameters

#### 8.1.1 Occupational exposure limits

This MSDS according to Article 32 specifies German regulation only.  
For other countries: Contact your local authorities.

#### **German Regulation:**

##### **General dust exposition limit**

Specification: TRGS 900 – workplace limitation  
Values: 3 mg/m<sup>3</sup> respiratory fraction  
10 mg/m<sup>3</sup> respirable fraction  
Peak limit: 2 (II)  
Time excess factor Duration 15 min, Average; 4 times per shift; gap 1h  
Monitoring procedures dust measurement, IFA-workbook 6068

##### **Quartz, respiratory fraction**

Specification: MAK: 0.15 mg/m<sup>3</sup>  
Comment: exposure limit MAK: 0,15 mg/m<sup>3</sup> for respiratory fraction  
Control measures: dust measurement, IFA-workbook 7284 and 6068

#### 8.2.4 Measures related to consumer uses of the substances (as such or in mixtures)

Technical measures and application of suitable work procedures to avoid dust formation have priority over personal protection

## 9. Physical and Chemical Properties

### 9.1 Important health, safety and environmental information

#### 9.1.1 Appearance

Physical state	solid
Colour	grey-brown to red granulate
Odour	no specific odour

#### 9.1.2 Safety relevant basic data

pH-value	(Eluate 100 g in 900 ml water)	7-9
Grain density	(EN 1097-1)	0.4 – 1.8 kg/dm <sup>3</sup>
Bulk density	(EN 1097-3)	0.2 – 1.0 kg/dm <sup>3</sup>
Melting range		1200 - 1300 C

#### 9.2 Physical hazards

none

## 10. Stability and Reactivity

not applicable, mixture does not contain hazardous ingredients.

## 11. Toxicological Information

not applicable, no toxic effects known.

## 12. Ecological Information

not applicable, mixture does not contain hazardous ingredients.

## 13. Disposal Considerations

### 13.1 Waste treatment methods

none

#### 13.1.1 Waste codes / waste designation according to EWC /AVV

10 12 99	wastes from manufacture of ceramic goods, bricks, tiles and construction products not otherwise specified
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## 14. Transport Information

not classified as hazardous product

## 15. Regulatory Information

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

#### 15.1.1 EU regulations

Restrictions on use	none
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#### 15.1.2 National regulations (Germany) - Technische Regeln für Gefahrstoffe

TRGS 559	Mineralischer Staub (dust from minerals)
TRGS 900:	Arbeitsplatzgrenzwert (workplace limits)

#### 15.2 Chemical safety assessment

none

**16. Other Information****16.1 Indication of changes**

This MSDS was completely reviewed according to EG 1907/2006, revised by EC 453/2010

**16.2 Abbreviations**

<b>EC</b>	European Community
<b>EN</b>	European standard
<b>IFA</b>	Institut für Arbeitsschutz der Deutschen Gesetzlichen Unfallversicherung (Institute for Occupational Safety and Health of the German Social Accident Insurance)
<b>ISO</b>	International Standards Organization
<b>MAK</b>	Maximale Arbeitsplatz Konzentration (Maximum workplace concentration)
<b>PBT</b>	Persistent, Bioaccumulative, Toxic
<b>TRGS</b>	Technische Regeln für Gefahrstoffe (Germany) (Technical regulations on hazardous substances)
<b>UN</b>	United Nations
<b>vPvB</b>	very Persistent and very Bioaccumulative

**Relevant R-, H- and EUH-phrases (number and full text):****Quartz, respirable dust**

< 10 % STOT RE 2

H 373 May cause damage to organs through prolonged or repeated exposure (silicosis).

**Training advice**

The user is responsible for adequate information, instructions and tuition of personnel.