

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

Trade name / designation

Liapor[®]
Liaperl[®]
Liaflor[®]
Liaqua[®]
Liadrain[®]**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[®] Insulating ingredients for lightweight construction materials, embankment material
crushed: lightweight sand, road grit

Liaperl[®] Filter materials for waste gas, air and wastewater treatment, ponds, etc.

Liaflor[®] Mineral substrates, hydroponics, etc.

Liaqua[®] Filter materials for waste gas, air and wastewater treatment, ponds, etc.

Liadrain[®] 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**1.4 Emergency Telephone Number**

+49 (0)30 30686 790

2. Hazards Identification**2.1 Classification of the substance or mixture**

Regulation (EC) No 1272/2008 [CLP/GHS]

none

No information available for acute dermal or inhalative toxicity

2.2 Label elements

none

Not classified as PBT or vPvB.

2.3 Other hazards

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 < 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 |
| - ingestion | (unlikely exposition path) 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 Precautions for safe handling

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/m³ respiratory fraction
10 mg/m³ 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/m³

Comment: exposure limit MAK: 0,15 mg/m³ for respiratory fraction

Control measures: dust measurement, IFA-workbook 7284 and 6068

8.2 Exposure controls

Technical measures and application of suitable work procedures to avoid dust formation have priority over personal protection (see 6.1)

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 ³ |
| Bulk density | (EN 1097-3) | 0.2 – 1.0 kg/dm ³ |
| 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 |
|----------|---|

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

EU regulations

Restrictions on use none

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**Indication of changes**

Editorial corrections

Abbreviations

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

Relevant 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.