



## Material Safety Data Sheet. (MSDS) according EU 1907/2006/EG, Article 31

PAGEL Spezial-Beton GmbH & Co. KG

Trade name: **ZL10 injection grout**

Printing date 22.10.2008 / Reviewed on 31.03.2008

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### 1 Identification of substance

- Product details
- Trade name: **ZL10 injection grout**
- Application of the substance: *injection grout*
- Manufacturer / Supplier:  
*PAGEL Spezial-Beton GmbH & Co KG*  
*Wolfsbankring 9*  
*D-45355 Essen*
- Informing department: *Laboratory*
- Emergency information:  
*Tel.: +49 (0)201 / 6 85 04-37*  
*Fax: + 49 (0)201 / 6 85 04-31*

### 2 Composition / Data on components

- Chemical characterisation
- Description: Cement mortar, fine-grain aggregates and active bonding additives.
- Dangerous components:

CAS-No.	Designation	%	Index R-phrases
65997-15-1	Portland cement	25-50	38, 41
EINECS: 266-043-4			

### 3 Hazards identification

- Hazard designation: *Xi Irritant*
- Information pertaining to particular dangers for man and environment:  
*R38 Irritating to skin*  
*R41 Risk of serious damage to eyes*
- *Portland cement reacts with acids by developing heat - danger of spurting*
- Classification system:  
*The classification is in line with current EC lists. It is expanded, however, by information from technical literature and by information furnished by supplier companies.*
- *Observe to no. 11 and 12*



### 4 First aid measures

- General information: *This product contains cement. Cement produces an alkaline reaction with moisture or gauging water and therefore splashes of mortar, slurry or gauging water may cause skin irritation and/or caustic burns to mucous membranes (e.g. eyes). Avoid contact with eyes and prolonged skin contact.*
- After skin contact:  
*Immediately wipe off substance and wash with plenty of soap and water.*
- After eye contact:  
*Rinse eyes for at least 15 minutes under running water with eyelids held open. Immediately consult a doctor.*
- After swallowing: *Rinse out mouth and then drink plenty of water. Seek immediate medical advice.*
- After inhalation: *Supply fresh air and consult doctor.*



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### 5 Fire fighting measures

- Suitable extinguishing agents: *Not applicable*
- For safety reasons unsuitable extinguishing agents: *Not applicable*
- Protective equipment: *No special measures required*
- General advice: *In connection with fire-fighting water a strong alkaline effect is resulting which may cause caustic injuries and skin provoking.*

### 6 Accidental release measures

- Person-related safety precautions: *Avoid causing dust*
- Measures for environmental protection: *No special measures required*
- Measures for cleaning/collecting: *Collect mechanically*
- Additional information: *No dangerous materials are released*

### 7 Handling and storage

- Handling
- Information for 'safe handling: *No special measures required*
- Information about protection against explosions and fires:  
*No special measures required*
- Storage
- Requirements to be met by storerooms and containers: *No special requirements*
- Information about storage in one common storage facility: *Not required*
- Further information about storage conditions: *Keep containers securely closed and dry and frost-free*
- Storage class: *VCI-Storage class: LGK 13: Non-combustible solids*
- Class according to regulation on inflammable liquids: *Void*

### 8 Exposure controls and personal protection

- Additional information about design of technical systems:  
*No further data; see item 7*
- Components with critical values that require monitoring at the workplace:

CAS-No.	Designation of material	Value	Unit
65997-15-1	Portland cement	5 (E)	mg/m <sup>3</sup>
14808-60-7	quarz	0,15 (A)	mg/m <sup>3</sup>
	regular dust limit value	3 (A)	mg/m <sup>3</sup>
		10 (E)	mg/m <sup>3</sup>

- Additional information:  
*The list that were valid during the compilation were used as basis*
- Personal protective equipment:
- General protective and hygienic measures:  
*The usual precautionary measures should be adhered to in handling the chemicals.*
- Breathing equipment: *Not required*
- Protection of hands: *Nitrile impregnated cotton-gloves*
- Penetration time of glove material:  
*The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.*
- Eye protection: *Wear safety goggles when working above eye level of if there is danger of splashing.*
- Body protection: *Protective work clothing*



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### 9 Physical and chemical properties:

- Form: *Solid*
- Colour: *Grey*
- Smell: *Odourless*

	value / range	unit/ marks	Method
<b>pH-value (T=23 °C)</b>	11,5-13,0		in mixed form within intended use
<b>Melting point/Melting range</b>	Not determined		
<b>Boiling point/ Boiling range:</b>	Not applicable		Solid not inflammatory
<b>Flash point:</b>	Not applicable		
<b>Self-in flammability:</b>	Not applicable		
<b>Vapoe density (T=20°C)</b>	900-1500	kg/m <sup>3</sup>	
<b>Solubility (T=20°C) - Water solubility</b>	Low		

### 10 Stability and reactivity

- Conditions to be avoided:  
*No decomposition if used according to specifications*
- Dangerous reactions: *No dangerous reactions know*
- Dangerous products of composition:  
*None if handled and stored properly*

### 11 Toxicological information

- Acute toxicity: *Irritating and sensitising*
- Primary irritant effect:
- On the skin: *Irritating in applicable consistence*
- On the eye: *Irritant effect*
- Sensitisation: *No sensitising effect known*
- Additional toxicological information:  
*The product is subject to classification according to the calculation method of the General EC Classification Guidelines for Preparations as issued in the latest version: Irritant*

### 12 Ecological information

- General notes:  
*Water hazard class 1 (Self-assessment): slightly hazardous for water. Do not allow product to reach ground water, water bodies or sewage system.*



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### 13 Disposal considerations

- Product:
- Recommendation:  
*Smaller quantities can be disposed of with household waste or commercial waste.*
- Waste key number (D):  
170101 AVV – code      Designation: concrete  
101314 AVV – code      Designation: rubble, concrete sludge
- Unclean packaging:  
Recommendation: *Disposal must be made according to official regulations*  
*Carefully emptied packs can be disposed of by REPASACK.*
- Recommended cleaning agent: *Water, if necessary with cleaning agent*

### 14 Transport information

- Transport / Additional information:  
*Not classified as dangerous goods as per above regulations*

### 15 Regulatory information

- Designation according to EC-guidelines:  
*The product is subject to classification according to the calculation methods of the „General Classification Guideline for Preparations of the EC“ as issued in the latest version.*  
*Observe the normal safety regulations when handling chemicals.*
- Code letter and hazard designation of product: *Xi Irritant* 
- Hazard-determining components for labelling: *Cement*
- R-phrases:  
R 38      *Irritating to skin*  
R 41      *Risk of serious damage to eyes*
- S-phrases:  
S 22      *Do not breath dust*  
S 24      *Avoid contact with skin and eyes*  
S 26      *In case of contact with eyes rinse immediately with plenty of water and seek medical advice*  
S 37/39      *Wear suitable gloves and wear safety glaces*

Is the product available for everybody, then as well:

- S 2      *Keep out of the reach of children*
- S 46      *when swallowing catch up immediately medical advice and show packing or label*

#### National regulations:

- GISCODE:    *ZP1*
- Classification according to VbF: *Void*
- Water hazard class:  
*Water hazard class 1 (Self-assessment): slightly hazardous for water*
- UVV: *"Application of coating materials" (VBG 23)*
- TRGS 613



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### **16 Other information**

*These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.  
With new edition this expenditure becomes invalid.*

Sources:           <sup>1</sup> <http://www.baua.de/prax/>  
                          <sup>2</sup> <http://www.hvbg.de/d/pages/prae/v/vorschr/index.html> oder  
                              <http://www.carl-heymanns-verlag.de/servlet/PB/menu/-1/index.html>

The datas in this MSDS describe the safety requirements of our product and represent no warranty of product properties.

For further information, see also the leaflet of this product.

Data sheet issuing range: See point 1

- Contact: *Mr. D. Schempershofe (QS)*