1. Identification of the substance/preparation and of the company/undertaking

Identification of the substance or preparation

LUX ELEMENTS®-COL-FLEX

Use of the substance/preparation

Adhesive

Company/undertaking identification

LUX ELEMENTS GmbH & Co. KG, An der Schusterinsel 7, D-51379 Leverkusen
Telephone +49 (0)2171/72 12-0, Fax +49 (0)2171/72 12-40
info@luxelements.de, www.luxelements.de

Emergency telephone / Office for advice

Advisory office in case of poisoning:
Tel.: ---

Telephone number of the company in case of emergencies:
Tel. +49 5262 / 99 39 657 (LEC)

2. Composition/information on ingredients

2.1 Chemical name content % symbol R-phrases EINECS, ELINCS
Portland cement 30 - 50 Xi 38-41-43 266-043-4
For complete wording of the R-phrases, refer to point 16.

3. Hazards identification

3.1 To people
See point 11 and 15.
Preparation is classified as hazardous in the sense of directive 1999/45/EC.
Irritation of the skin.
Risk of serious damage to eyes.
Low-chromate according to technical regulations for hazardous substances 613 (Germany).
(Cr6+ < 2 ppm)

3.2 To the environment
See point 12.
reacts with water
Alkaline reaction
High pH-value can be harmful to water.

4. First aid measures

Never pour anything into the mouth of an unconscious person!

4.1 Inhalation
Remove person from danger area.
Supply person with fresh air and consult doctor according to symptoms.

4.2 Eye contact
Wash thoroughly for several minutes using copious water - call doctor immediately, have Data Sheet available.

4.3 Skin contact
Wash thoroughly with soap and copious water - remove contaminated clothing immediately. If skin irritation occurs (redness etc.), consult doctor. Unsuitable cleaning product:
Solvent
Thinners

4.4 Ingestion
Do not induce vomiting - give copious water to drink. Consult doctor immediately. Keep Data Sheet available.

4.5 Special resources necessary for first aid
n.c.

5. Fire-fighting measures

5.1 Suitable extinguishing media
Adapt to the nature and extent of fire.
Product is not combustible.

5.2 Extinguishing media which must not be used for safety reasons
Not applicable.

5.3 Special exposure hazards arising from the substance or preparation itself, combustion products, resulting gases
In case of fire the following can develop:
Oxides of carbon
Oxides of nitrogen
Toxic pyrolysis products.

5.4 Special protective equipment for fire-fighters
Protective respirator with independent air supply

5.5 Further information
Dispose of contaminated extinction water according to official regulations.
Extinction water produces an alkaline reaction.

6. Accidental release measures

Refer to point 13. and for personal protection refer to point 8.

6.1 Personal precautions
Ensure sufficient supply of air.
Avoid build up of dust.
Avoid inhalation, and contact with eyes or skin.

6.2 Environmental measures
If leakage occurs, dam up.
Prevent from entering drainage system.
Prevent surface and ground-water infiltration, as well as ground penetration.
If accidental entry into drainage system occurs, inform responsible authorities.

6.3 Methods for cleaning up
Collect mechanically and dispose of according to point 13.
Avoid build up of dust.
Collect spilled material with a dust-trapping sweeping agent or a suitable vacuum cleaner.
Neutralising is possible (only from a specialist)

7. Handling and storage

7.1 Handling
Tips for safe handling:
See point 6.1
Ensure good ventilation.
Avoid build up of dust.
Avoid contact with eyes or skin.
Eating, drinking, smoking, as well as food-storage, is prohibited in work-room.
Wash hands before breaks and at end of work.
Use working methods according to operating instructions. 
Observe directions on label and instructions for use.

7.2. Storage
Requirements for storage rooms and containers:
Not to be stored in gangways or stair wells.
Store products only unopened, in original packing.

Special storage conditions:
See point 10.2
Protect against moisture and store closed.
Protect from direct sunlight and warming.
Store cool
Protect from frost.
Store in a well ventilated place.

8. Exposure controls/personal protection

Ensure good ventilation. This can be achieved by local suction or general air extraction.
If this is insufficient to maintain the concentration under the WEL or AGW values, suitable breathing protection should be worn.
Applies only if maximum permissible exposure values are listed here.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Workplace Exposure Limit - Long-term exposure limit (8-hour TWA (= time weighted average) reference period) EH40, AGW = &quot;Arbeitsplatzgrenzwert&quot; (workplace limit value, Germany).</th>
<th>Workplace Exposure Limit - Short-term exposure limit (15-minute reference period).</th>
<th>Biological monitoring guidance value EH40, BGW = &quot;Biologischer Grenzwert&quot; (biological limit value, Germany)</th>
<th>Other information: Sen = Capable of causing occupational asthma. Sk = Can be absorbed through skin. Carc = Capable of causing cancer and/or heritable genetic damage. ** = The exposure limit for this substance is repealed through the TRGS 900 (Germany) of January 2006 with the goal of revision.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemical Name</td>
<td>WEL-TWA: 10 mg/m³ (total inh. dust), 4 mg/m³ (res. dust)</td>
<td>WEL-STEL: ---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Chemical Name</td>
<td>WEL-TWA: 0,1 mg/m³ (silica, respirable, crystalline)</td>
<td>WEL-STEL: ---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Chemical Name</td>
<td>WEL-TWA: 10 mg/m³ (inhal. dust), 4 mg/m³ (respir. dust)</td>
<td>WEL-STEL: ---</td>
<td>---</td>
<td>---</td>
</tr>
</tbody>
</table>

8.1 Respiratory protection:
Normally not necessary.
If OES or MEL is exceeded,
Breathing mask with fine-dust filter (EN 143).
Filter P2, FFP2 (EN 141)

8.2 Hand protection:
Chemical resistant protective gloves (EN 374).
Recommended
Protective nitrile gloves (EN 374)
Minimum layer thickness in mm: 0,11
Permeation time (penetration time) in minutes: > 480
Suitable are, e.g., safety gloves from KCL GmbH Co., D-36124 Eichenzell, e-mail vertrieb@kcl.de, following specifications:
740 Dermatri
Protective hand cream recommended.

8.3 Eye protection:
Tight fitting protective goggles with side protection (EN 166).
If applicable
Face protection (EN 344)

8.4 Skin protection:
Protective working garments (e.g. safety shoes EN 344, long-sleeved protective working garments)
Natural fibre or heat-resistant synthetic fibre.
Additional information on hand protection - No tests have been performed.
Selection made for preparations according to the best available knowledge and information on the ingredients.
Selection of materials derived from glove manufacturer's indications.
Final selection of glove material must be made taking the breakthrough times, permeation rates and degradation into account.
Selection of a suitable glove depends not only on the material but also on other quality characteristics and varies from manufacturer to manufacturer.
In the case of preparations the resistance of glove materials cannot be calculated in advance so it has to be tested before use. The exact breakthrough time of the glove material can be requested from the protective glove manufacturer and must be observed.

9. Physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Solid, powder</td>
</tr>
<tr>
<td>Colour</td>
<td>Grey</td>
</tr>
<tr>
<td>Odour</td>
<td>Odourless</td>
</tr>
<tr>
<td>pH-value undiluted</td>
<td>n.a.</td>
</tr>
<tr>
<td>10 % pH-value</td>
<td>Alkaline reaction</td>
</tr>
<tr>
<td>Boiling point/range (°C)</td>
<td>n.a.</td>
</tr>
<tr>
<td>Flash point (°C)</td>
<td>n.a.</td>
</tr>
<tr>
<td>Flammability (solid/gas)</td>
<td>n.a.</td>
</tr>
<tr>
<td>Oxidising properties</td>
<td>No</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>n.a.</td>
</tr>
<tr>
<td>Bulk density</td>
<td>1.33 g/cm³</td>
</tr>
<tr>
<td>Solubility in water</td>
<td>Mixable</td>
</tr>
<tr>
<td>Solubility in oil / solvent</td>
<td>No</td>
</tr>
<tr>
<td>Viscosity</td>
<td>n.a.</td>
</tr>
</tbody>
</table>

10. Stability and reactivity

10.1 Conditions to avoid
See point 7
Stable when handled and stored correctly.
Protect from humidity.

10.2 Materials to avoid
See point 7
No dangerous reactions are known.

10.3 Hazardous decomposition products
No decomposition when used as directed.

11. Toxicological information

11.1 Acute toxicity and immediate effects
Ingestion, LD50 rat oral (mg/kg): n.av.
Inhalation, LC50 rat inhal. (mg/l/4h): n.av.
Skin contact, LD50 rat dermal (mg/kg): See point 15.
Eye contact: See point 15.

11.2 Delayed and chronic effects
Sensitization: Low-chromate, No
Carcinogenicity: n.c.
Mutagenicity: n.c.
Reproductive toxicity: n.c.
Narcosis: n.c.

11.3. Further information
The product was not tested.
Classification according to calculation procedure.
The following may occur:
Reaction with humidity of skin.
Alkaline reaction
Dermatitis (skin inflammation)
Itching
On dust formation:
Watering eyes
Irritation of the respiratory tract
Irritant to mucosa of the nose and throat.

12. Ecological information

Water hazard class (Germany): 1
Self classification: Yes (VwVwS)
Persistence and degradability: Inorganic products cannot be eliminated from water through biological purification methods.
Behaviour in sewage plants: According to the recipe, contains no AOX.
Aquatic toxicity: n.av.
Ecological toxicity: n.av.

13. Disposal considerations

13.1. for the material / preparation / residue
EC disposal code no.: The waste codes are recommendations based on the scheduled use of this product. Owing to the user's specific conditions for use and disposal, other waste codes may be allocated under certain circumstances. (2001/118/EC, 2001/119/EC, 2001/573/EC)
10 13 11 wastes from cement-based composite materials other than those mentioned in 10 13 09 and 10 13 10
10 13 14 waste concrete and concrete sludge
17 01 07 mixtures of concrete, bricks, tiles and ceramics other than those mentioned in 17 01 06
Recommendation: Pay attention to local and national official regulations.
E.g. dispose at suitable refuse site.
E.g. suitable incineration plant.

13.2 for contaminated packing material
See point 13.1
Pay attention to local and national official regulations
15 01 01 paper and cardboard packaging
15 01 02 plastic packaging
Empty container completely.
Uncontaminated packaging can be recycled.
Dispose of packaging that cannot be cleaned in the same manner as the substance.

14. Transport information

General statements
UN-Number: n.a.
Road/Rail-transport (ADR/RID)
Class/packing-group: n.a.
Classification code: n.a.
LO: n.a.
Transport by sea
IMDG-code: n.a. (class/packing-group)
Marine Pollutant: n.a.
Transport by air
IATA: n.a. (class/secondary danger/packing-group)
Additional information:
Non-dangerous material according to Transport Regulations.

15. Regulatory information

Classification according to Dangerous Product Regulations incl. EC Directives (67/548/EEC and 1999/45/EC)

Symbols:  Xi
Indications of danger:
Irritant
R-phrases:
38 Irritating to skin.
41 Risk of serious damage to eyes.
S-phrases:
(2) Keep out of the reach of children.
24/25 Avoid contact with skin and eyes.
26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
35 This material and its container must be disposed of in a safe way.
37/39 Wear suitable gloves and eye/face protection.
(46) If swallowed, seek medical advice immediately and show this container or label.
Additions:  n.a.
Observe restrictions:  Yes
Observe youth employment law (German regulation).
Observe restrictive guidelines 76/769/EEC, 1999/51/EC, 1999/77/EC
VOC 1999/13/EC 0%

16. Other information

These details refer to the product as it is delivered.
Storage class VCI (Germany):  13
Revised points:  1
The following phrases represent the prescribed R-phrases for the ingredients (designated in point 2).
38 Irritating to skin.
41 Risk of serious damage to eyes.
43 May cause sensitization by skin contact.

Legend:

n.a. = not applicable / n.v., k.D.v. = n.av. = not available / n.g. = n.c. = not checked
WEL = Workplace Exposure Limit EH40, TWA = Long-term exposure limit (8-hour TWA (= time weighted average) reference period), STEL = Short-term exposure limit (15-minute reference period) / BMGV = Biological monitoring guidance value EH40
AGW = "Arbeitsplatzgrenzwert" (workplace limit value, Germany) / BGW = "Biologischer Grenzwert" (biological limit value, Germany)
VbF = Regulations for flammable liquids (Austria)
WGK = water hazard class (Germany) - WGK 3 = very hazardous, WGK 2 = hazardous, WGK 1 = slightly hazardous to water
VOC = Volatile organic compounds / AOX = Adsorbable organic halogen compounds
VwVwS = Administrative Order relating to substances hazardous to water (Germany)

The statements made here should describe the product with regard to the necessary safety precautions - they are not meant to guarantee definite characteristics - but they are based on our present up-to-date knowledge.
No responsibility.
These statements were made by:
Chemical Check GmbH, Beim Staumberge 3, D-32839 Steinheim, Tel.: +49 5233 94 17 0, +49 1805-CHEMICAL / +49 180 52 43 642, Fax: +49 5233 94 17 90, +49 180 50 50 455
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