

Safety data sheet

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Code: **LIXIO-POWDER**
Name: **Pre-blended, fiber reinforced cement-based admixture**

1.2. Relevant identified uses of the substance or mixture and uses advised against

Product for LIXIO® Microterrazzo

1.3. Details of the supplier of the safety data sheet

Company name: **IDEAL WORK SRL**
Address: **Via Kennedy, 52**
Place and country: **31030 Vallà di Riese Pio X (TV)**
Italy
tel. **0423/4535**
fax **0423/748429**
e-mail address for a competent person, sicurezza@idealwork.it

1.4. Emergency telephone number

For information in an emergency: **Poison center:**
National Poisons Information Service (Birmingham Unit)
City Hospital
Dudley Rd
Birmingham
Telephone: +44 121 507 4123
Fax: +44 121 507 55 88
Emergency telephone: 844 892 0111

SECTION 2: Hazards identification

2.1. Substance or mixture classification.

The product is classified as dangerous according to the provisions of Regulation (EC) 1272/2008 (CLP) (and subsequent amendments and adjustments). The product therefore requires a safety data sheet in compliance with the provisions of Regulation (EC) 1907/2006 and subsequent amendments. Any additional information concerning risks to health and / or the environment are reported in the sec. 11 and 12 of this sheet.

2.1.1. Regulation 1272/2008 (CLP) and subsequent amendments and adjustments.

Classification and indications of danger:

Eye Dam. 1	H318
Skin Irrit. 2	H315
STOT SE 3	H335
Skin Sens. 1	H317

2.1.2. Directives 67/548 / EEC and 1999/45 / EC and subsequent amendments and adjustments.

Danger symbols:

Xi

R phrases:

37 / 38-41-43

The full text of the risk phrases (R) and hazard statements (H) is given in section 16 of the sheet.

2.2. Elements of the label.

Danger labeling according to Regulation (EC) 1272/2008 (CLP) and subsequent amendments and adjustments.



Warning: Danger

H318 Causes serious eye damage.

H315 Causes skin irritation.

H335 May cause respiratory irritation.



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H317 May cause an allergic skin reaction.

P201 Keep out of reach of children.

P280 Wear protective gloves and clothing, protect eyes and face.

P305 + P351 + P338 + P312 IN CASE OF CONTACT WITH EYES: Rinse thoroughly with water for several minutes. Remove any contact lenses if it is easy to do. Continue to rinse. If you feel unwell, contact a POISON CENTER or doctor

P302 + P352 + P333 + P313 IN CASE OF SKIN CONTACT: wash with plenty of water and soap. In case of irritation or skin rash, consult a doctor.

P261 + P304 + P340 + P312 Avoid breathing dust. **IN CASE OF INHALATION:** transport the injured person to the air

open and keep it at rest in a position that promotes breathing. In case of illness, contact a

POISON CENTER or a doctor.

P501 Dispose of contents / container in accordance with local regulations.

Contains: Portland cement

Natural calcium carbonate

Dispose of the product / container in accordance with the regulations in force.

2.3. Other dangers.

Information not available.

SECTION 3: Composition/information on ingredients

3.1. Substances.

Information not applicable.

3.2. Mixtures.

It Contains:

Identification	Conc. %.	Classification 67/548/CEE.	Classification 1272/2008 (CLP).
Portland Cement			
CAS. 65997-15-1	55 - 72	Xi R37/38, Xi R41, Xi R43	Eye Dam. 1 H318, Skin Irrit. 2 H315, STOT SE 3 H335, Skin Sens. 1 H317
CE. 266-043-4			
INDEX. -			
Calcium carbonate			
CAS. 65997-15-1	25 - 40		
CE. 266-043-4			
INDEX. -			

Note: Upper value of the excluded range.

The full text of the risk phrases (R) and hazard statements (H) is given in section 16 of the sheet.

T + = Very Toxic (T +), T = Toxic (T), Xn = Harmful (Xn), C = Corrosive (C), Xi = Irritating (Xi), O = Comburent (O), E = Explosive (E), F + = Extremely Flammable (F +), F = Easily Flammable (F), N = Dangerous for the Environment (N)

SECTION 4: First aid measures

4.1. Description of first aid measures

Not specifically necessary. Good industrial hygiene practice rules must nevertheless be followed.

4.2. Most important symptoms and effects, both acute and delayed

No harms to human health due to exposure to the product are known.

4.3. Indication of any immediate medical attention and special treatment needed

Information not available.

SECTION 5: Firefighting measures

5.1. Extinguishing media

The product is not classified as flammable, combustible, or oxidising, in the event of fire choose the most suitable extinguishing means for the surrounding environment.

5.2. Special hazards arising from the substance or mixture

In the event of fire, do not breathe the combustion products.

5.3. Advice for firefighters

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Always wear personal protective equipment, including fire protection. Collect the extinguishing water, which must not be discharged into the drains. Dispose of the contaminated water used for extinguishing the fire and the fire residue in compliance with current standards.

EQUIPMENT

Normal firefighting gear like a self-contained open-circuit compressed air breathing apparatus (EN 137), firefighting suit (EN469), protective gloves for firefighters (EN 659) and boots for fire services (HO A29 or A30).

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

In the case of airborne vapours and dusts, use respiratory protective devices. These instructions apply to both workers and emergency responders.

6.2. Environmental precautions

Prevent the product entering drains, surface water or groundwater.

6.3. Methods and material for containment and cleaning up

Stem with earth or inert material. Collect most of the material and eliminate the residue with jets of water. The contaminated material must be disposed of in compliance with the provisions of section 13.

6.4. Reference to other sections

Information on personal protective equipment and disposal is set out in sections 8 and 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Handle the product after consulting all the other sections of this safety data sheet. Do not release the product in the environment. Do not eat, drink or smoke when using this product.

7.2. Conditions for safe storage, including any incompatibilities

Keep the product in clearly labelled containers. Keep the containers away from any incompatible materials, checking section 10.

7.3. Specific end uses

Information not available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters.

Normative requirements:

Italy Legislative Decree 9 April 2008, n. 81.

OEL EU Directive 2009/161 / EU; Directive 2006/15 / EC; Directive 2004/37 / EC; Directive 2000/39 / EC.

TLV-ACGIH ACGIH 2013

Portland cement						
Threshold limit value.						
Type	State	TWA/8h		STEL/15min		Notes
		mg/m3	ppm	mg/m3	ppm	
TLV-ACGIH		1				A4 (e, j)

Calcium carbonate						
Threshold limit value.						
Type	State	TWA/8h		STEL/15min		Notes
		mg/m3	ppm	mg/m3	ppm	
DNEL	EU	10				

DNEL EU 10

Legend:

A4 = not classified as a human carcinogen

(e) = for particles not containing asbestos and crystalline silica <1%

(j) = respirable fraction measured as indicated by the ACGIH

Irrt = irritant Oclr = eyepiece Skin = skin Rspr = respiratory

C) = CEILING; INALAB = Inhalable fraction; RESPIR = Breathable fraction; TORAC = Thoracic fraction.



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It is recommended to consider in the risk assessment process the occupational exposure limit values foreseen by ACGIH for inert powders not otherwise classified (PNOC breathable fraction: 3 mg / mc; PNOC inhalable fraction: 10 mg / mc). If these limits are exceeded, we recommend using a type P filter whose class (1, 2 or 3) must be chosen according to the outcome of the risk assessment.

8.2. Exposure controls.

Considering that the use of adequate technical measures should always take priority over personal protective equipment, ensure good ventilation in the workplace through effective local aspiration.

For the selection of personal protective equipment, if necessary, ask your chemical suppliers for advice.

The individual protection devices must bear the CE marking which certifies their compliance with the regulations in force.

Provide emergency shower with visocular basin.

HAND PROTECTION

If prolonged contact with the product is envisaged, it is advisable to protect the hands with penetration resistant work gloves (see standard EN 374), such as latex gloves, nitrile rubber, neoprene and PVC. For the final choice of the work glove material, the process of using the product and any other products deriving from it must also be evaluated. It is also recalled that latex gloves can give rise to sensitization phenomena.

SKIN PROTECTION

Wear work clothes with long sleeves and safety footwear for professional use in category II (see Directive 89/686 / EEC and EN ISO 20344). Wash with soap and water after removing protective clothing.

PROTECTION OF EYES

It is advisable to wear a hood visor or protective visor combined with airtight goggles (see standard EN 166).

RESPIRATORY PROTECTION

It is advisable to use a P-type filter mask whose class (1, 2 or 3) and actual necessity, must be defined according to the outcome of the risk assessment (see standard EN 149).

Emissions from production processes, including those from ventilation equipment, should be monitored for compliance with environmental protection legislation.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Powder
Color	White
Odor	No odor
Odor threshold	Not available
pH	Not available
Melting point/freezing point	>1250°
Initial boiling point	Not applicable
Boiling range	Not available
Flash point	Not applicable
Evaporation rate	Not available
Flammability (solid, gas)	Not available
Lower flammability limit	Not applicable (there are no chemical groups present in the molecule associated with explosive properties. Refer to Annex I of Regulation (EC) No. 1272/2008 section 2.8.4.2 a)
Upper flammability limit	Not applicable (there are no chemical groups present in the molecule associated with explosive properties. Refer to Annex I of Regulation (EC) No. 1272/2008 section 2.8.4.2 a)
Lower explosive limit	Not available
Upper explosive limit	Not available
Vapor pressure	Not available
Vapor density	Not available
Relative density	Not available
Solubility	Not available
Partition coefficient: n-octanol/water	Not available
Auto-ignition temperature	Not available
Decomposition temperature	Not available
Viscosity	Not available
Explosive properties	Not applicable (there are no chemical groups present in the molecule associated with oxidising properties. Refer to Annex I of Regulation (EC) No. 1272/2008 section 2.1.4.3)
Oxidising properties	Not applicable (there are no chemical groups present in the molecule associated with explosive properties. Refer to Annex I of Regulation (EC) No. 1272/2008 section 2.8.4.2 a)

9.2. Other information

Information not available.



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SECTION 10: Stability and reactivity

10.1. Reactivity

There are no particular hazards of reactions with other substances in normal conditions of use.

10.2. Chemical stability

The product is stable in normal conditions of use and storage.

10.3. Possibility of hazardous reactions

In normal conditions of use and storage hazardous reactions are not likely.

10.4. Conditions to avoid

None in particular. Nevertheless, take the usual precautions to be followed with dealing with chemical products.

10.5. Incompatible materials

Prevent the product coming into contact with acids.

10.6. Hazardous decomposition products

The presence of calcium carbonate can lead to the formation of calcium oxides and carbon oxides.

SECTION 11: Toxicological information

11.1. Information on toxicological effects.

In the absence of experimental toxicological data on the product itself, the possible dangers of the product for health have been evaluated on the basis of the properties of the substances contained, according to the criteria provided for by the reference standard for classification. Consider therefore the concentration of the individual hazardous substances mentioned in section 3, to evaluate the toxicological effects deriving from exposure to the product.

a) Acute toxicity;

Ingestion can cause health problems, which include abdominal pain with burning, nausea and vomiting.

CALCIUM CARBONATE

LD50 (Oral) - 6450 mg / kg Rat

b) Skin corrosion / irritation;

Contact with the skin causes irritation.

SECTION 12: Toxicological information

12.1 Toxicity

CEMENT

Cement is not dangerous for the environment. The ecotoxicity tests with Portland cement on *Daphnia magna* [Bibliography (5)] and *Selenastrum coli* [Bibliography (6)] have shown a small toxicological impact. Therefore the LC50 and EC50 values cannot be determined [Bibliography (7)]. There are no indications of sedimentary phase toxicity [Bibliography (8)]. The addition of large amounts of cement to water may, however, cause an increase in pH and may therefore be toxic to aquatic life under certain circumstances.

CALCIUM CARBONATE

according to 1272/2008 / EC: Not classified as dangerous for the aquatic environment

Aquatic toxicity (acute) Endpoint EC50 - Value > 14 mg / l - Seaweed species - ECHA source - Exposure time 72 h

Aquatic toxicity (chronic) Endpoint EC50 - Value > 1,000 mg / l - Species microorganisms Source ECHA Exposure time 3 h

Aquatic toxicity (chronic) NOEC endpoints - Value > 1,000 mg / l - Species microorganisms Source ECHA Exposure time 3 h

12.2 Persistence and degradability

Not relevant, since white cement is an inorganic material. After hardening, the cement does not present any risk of toxicity.

The material is easily biodegradable.

Methods for determining biodegradability are not applicable to inorganic substances.

Process: carbon dioxide formation - degradation rate 90% - time 28 d

12.3 Bioaccumulative potential

Not relevant, since white cement is an inorganic material. After hardening, the cement does not present any risk of toxicity.

12.4 Mobility in the soil

Not relevant, since white cement is an inorganic material. After hardening, the cement does not present any risk of toxicity.



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12.5 Results of the PBT and vPvB assessment

Not relevant, since white cement is an inorganic material. After hardening, the cement does not present any risk of toxicity.

12.6 Other adverse effects

Not relevant.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

If possible, reuse. The product residues are to be considered special non-hazardous waste.

An authorized waste-management company must be used to dispose of the waste in compliance with national and local legislation.

Under no circumstances allow the product to enter the soil, drains or water courses.

For solid residues, the possibility of disposal in an authorized site must be considered.

CONTAMINATED PACKAGING

Contaminated packaging must be sent for recovery or disposal in compliance with national waste-management regulations.

SECTION 14: Transport information

The product must not be considered dangerous according to the provisions in force concerning the transport of dangerous goods by road (A.D.R.), by rail (RID), by sea (IMDG Code) and by air (IATA).

- | | |
|---|-----------------|
| 14.1. UN number: | not applicable |
| 14.2. UN shipping name: | not applicable |
| 14.3. Danger classes related to transport: | not applicable |
| 14.4. Packing group: | not applicable |
| 14.5. Environmental hazards: | not applicable |
| 14.6. Special precautions for users: | not applicable |
| 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: | not applicable. |

The product is not considered to be hazardous by current regulations governing the transport of hazardous products by road (A.D.R.), by rail (RID), by sea (IMDG Code) and by air (IATA).

SECTION 15: Regulatory information

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

Seveso category None.

Restrictions relating to the product or to the substances contained therein according to Annex XVII Regulation (EC) No. 1907/2006
None.

Substances on candidate list (Article 59 REACH)
None.

Substances subject to authorization (Annex XIV REACH)
None.

Substances subject to export notification Regulation (EC) No. 649/2012
None.

Substances subject to the Rotterdam Convention
None.

Substances subject to the Stockholm Convention
None.

Healthcare controls
Information not available.

15.2. Chemical safety assessment

No chemical safety assessment of the mixture or of the substances contained in the mixture has been carried out.



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SECTION 16: Other information

Text of the hazard (H) indications mentioned in sections 2-3 of the sheet:

Eye Dam. 1 Serious eye damage, category 1
Skin Irrit. 2 Skin irritation, category 2
STOT SE 3 Specific target organ toxicity - single exposure, category 3
Skin Sens. 1 Skin sensitization, category 1
H318 Causes serious eye damage.
H315 Causes skin irritation.
H335 May cause respiratory irritation.
H317 May cause an allergic skin reaction.

Text of the risk phrases (R) mentioned in sections 2-3 of the sheet:

R37 / 38 IRRITANT FOR RESPIRATORY TRACT AND SKIN.
R41 RISK OF SERIOUS EYE DAMAGE.
R43 MAY CAUSE SENSITIZATION BY SKIN CONTACT.

LEGEND:

- ADR: European Agreement for the transport of dangerous goods by road
- CAS NUMBER: Chemical Abstract Service number
- EC50: Concentration giving effect to 50% of the population subjected to tests
- CE NUMBER: ID number in ESIS (European archive of existing substances)
- CLP: EC Regulation 1272/2008
- DNEL: Derived level without effect
- EmS: Emergency Schedule
- GHS: Global harmonized system for the classification and labeling of chemicals
- IATA DGR: Regulations for the transport of dangerous goods of the International Air Transport Association
- IC50: Concentration of immobilization of 50% of the population subjected to tests
- IMDG: International Maritime Code for the transport of dangerous goods
- IMO: International Maritime Organization
- INDEX NUMBER: identification number in Annex VI of the CLP
- LC50: Lethal concentration, 50%
- LD50: Lethal dose, 50%
- OEL: Occupational Exposure Limits
- PBT: Persistent, bioaccumulative and toxic according to the REACH
- PEC: Predicted Environmental Concentration
- PEL: Permissible Exposure Limit
- PNEC: Predicted No Effect Concentration
- REACH: Regulation (EC) No. 1907/2006
- RID: Regulations concerning the International carriage of Dangerous goods by rail
- TLV: Threshold Limit Value
- TLV CEILING: concentration that must not be exceeded at any moment of working exposure
- TWA STEL: Short-term exposure limit
- TWA: time-weighted average exposure limit
- VOC: Volatile organic compound
- vPvB: very Persistent and very Bioaccumulative according to the REACH
- WGK: Water Hazard Class (Germany)

GENERAL BIBLIOGRAPHY:

1. Directive 1999/45 / EC and subsequent amendments
2. Directive 67/548 / EEC and subsequent amendments and adaptations
3. Regulation (EC) No. 1907/2006 of the European Parliament (REACH)
4. Regulation (EC) No. 1272/2008 of the European Parliament (CLP)
5. Regulation (EC) No. 790/2009 of the European Parliament (I Atp. CLP)
6. Regulation (EC) No. 453/2010 of the European Parliament
7. Regulation (EC) No. 286/2011 of the European Parliament (II Atp. CLP)
8. Regulation (EC) No. 618/2012 of the European Parliament (III Atp. CLP)
9. The Merck Index. Ed. 10
10. Handling Chemical Safety
11. Niosh - Registry of Toxic Effects of Chemical Substances
12. INRS - Fiche Toxicologique
13. Patty - Industrial Hygiene and Toxicology
14. N.I. Sax - Dangerous properties of Industrial Materials-7th Ed., 1989
15. ECHA Agency website Note for user:

The information contained in this data sheet is based on the knowledge in our possession at the date of the last version. The user must ascertain the suitability and completeness of the information in relation to the specific use of the product.

This document should not be interpreted as a guarantee of any specific property of the product.

Is the user's responsibility for compliance with current health and safety laws and regulations. No liability is accepted for improper use.

Train operators appropriately in the use of chemical products.