Safety data sheet (English translation without any country-specific legislation)
according to Regulation (EC) No 1907/2006, Article 31

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

· **1.1 Product identifier**
· **Trade name: X-FIX**

· **1.2 Relevant identified uses of the substance or mixture and uses advised against**
· **Life cycle stages**
PW Widespread use by professional workers
IS Use at industrial Sites
· **Sector of Use** SU19 Building and construction work
· **Product category**
PC0 Other: building and construction products
PC1 Adhesives, sealants
PC9b Fillers, putties, plasters, modelling clay
· **Process category**
PROC5 Mixing or blending in batch processes
PROC8a Transfer of substance or mixture (charging and discharging) at non-dedicated facilities
PROC8b Transfer of substance or mixture (charging and discharging) at dedicated facilities
PROC19 Manual activities involving hand contact
PROC26 Handling of solid inorganic substances at ambient temperature
· **Environmental release category**
ERC5 Use at industrial site leading to inclusion into/onto article
ERC8c Widespread use leading to inclusion into/onto article (indoor)
ERC8f Widespread use leading to inclusion into/onto article (outdoor)
· **Article category** AC4 Stone, plaster, cement, glass and ceramic articles

· **Application of the substance / the mixture** Cementitious adhesive for ceramic tiles

· **1.3 Details of the supplier of the safety data sheet**
· **Manufacturer/Supplier:**
Litokol Lab S.p.A.
Via G.Falcone, 13/1
42048 Rubiera (RE) - Italia
Tel. +39 0522 626391 - Fax. +39 0522 620150

· **Further information obtainable from:** Litokol Lab S.p.A. - Email: productsafety@litokol.com

· **1.4 Emergency telephone number:**
ITALY - POISONS CENTRES (24h / 365d):
• Milano - Azienda Ospedaliera Niguarda Ca' Granda - Tel. +39 02 66101029
• Pavia - Centro Nazionale d'Informazione Tossicologica - IRCCS Fondazione Salvatore Maugeri Clinica del Lavoro e della riabilitazione - Tel. +39 0382 24444
• Firenze - Azienda Ospedaliera Universitaria "Careggi" U.O. Tossicologia Medica - Tel. +39 055 7947819
• Bergamo - Azienda Ospedaliera "Papa Giovanni XXIII", tossicologia clinica - Tel. +39 800 883300
• Roma - CAV Policlinico "Umberto I", PRGM tossicologia d'urgenza - Tel. +39 06 49978000
• Roma - CAV del Policlinico "Agostino Gemelli", Servizio di tossicologia clinica - Tel. +39 06 3054343
• Roma - CAV “Ospedale Pediatrico Bambino Gesù”, dipartimento emergenza e accettazione DEA - Tel. +39 06 68593726
• Foggia - Azienda Ospedaliera Universitaria riuniti, Foggia - Tel. +39 800 183459
• Napoli - Azienda Ospedaliera "Antonio Cardarelli", III Servizio di anestesia e rianimazione - Tel. +39 081 5453333
• Verona - CAV dell'Azienda ospedaliera integrata (AOUI) di Verona sede di Borgo Trento - Tel. +39 800 011858

Litokol Lab S.p.A.
Technical support: Tel. +39 0522 622852 (Monday - Friday: 8.30-12.30 AM , 2.00-6.00 PM)

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SECTION 2: Hazards identification

· **2.1 Classification of the substance or mixture**
· **Classification according to Regulation (EC) No 1272/2008**
Skin Irrit. 2 H315 Causes skin irritation.
Eye Dam. 1 H318 Causes serious eye damage.
Skin Sens. 1 H317 May cause an allergic skin reaction.
STOT SE 3 H335 May cause respiratory irritation.

· **2.2 Label elements**
· **Labelling according to Regulation (EC) No 1272/2008**
The product is classified and labelled according to the CLP regulation.

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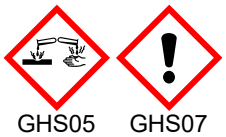
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· **Hazard pictograms**



GHS05 GHS07

· **Signal word** Danger

· **Hazard-determining components of labelling:**
Cement, portland, chemicals
calcium diformate

· **Hazard statements**
H315 Causes skin irritation.
H318 Causes serious eye damage.
H317 May cause an allergic skin reaction.
H335 May cause respiratory irritation.

· **Precautionary statements**

P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.
P261	Avoid breathing dust.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352	IF ON SKIN: Wash with plenty of water.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.

· **2.3 Other hazards**
When cement-containing mixtures react with water a strong alkaline solution is produced (high pH caused by the formation of calcium, sodium and potassium hydroxides).
Cement-containing mixtures may irritate the eyes, the mucous system, the throat and the respiratory system and cause coughing.
Frequent inhalation of cement-containing mixtures dust over a long period of time increases the risk of developing lung diseases.
Frequent contact between cement and moist skin (due to sweat or humidity) over a long period of time may cause irritation and/or dermatitis.
If significant amounts are ingested, cement-containing mixtures may cause ulcers in the digestive tract
In case of prolonged contact with the skin, both cement and cement-containing mixtures, including pastes, may cause skin sensitisation due to the presence of trace amounts of chromium VI salts. Where necessary, such an effect can be minimized by incorporating a special reducing agent to maintain the water-soluble chromium VI content to concentration rates below 0.0002% (2 ppm) on the total dry weight of cement, in compliance with the applicable legislation referred to in Section 15.

· **Results of PBT and vPvB assessment**
· **PBT:** The mixture does not contain substances that pose such a hazard at concentrations >0.1%.
· **vPvB:** The mixture does not contain substances that pose such a hazard at concentrations >0.1%.

· **Determination of endocrine-disrupting properties**
The mixture does not contain substances that pose such a hazard at concentrations >0.1%.

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SECTION 3: Composition/information on ingredients

· **3.2 Mixtures**
· **Description:** Mixture of substances listed below with nonhazardous additions.

· **Dangerous components:**		
CAS: 65997-15-1 EINECS: 266-043-4	Cement, portland, chemicals Eye Dam. 1, H318; Skin Irrit. 2, H315; Skin Sens. 1, H317; STOT SE 3, H335	≥25-≤50%
CAS: 544-17-2 EINECS: 208-863-7 Reg.nr.: 01-2119486476-24-XXXX	calcium diformate Eye Dam. 1, H318	1-2%
CAS: 14808-60-7 EINECS: 238-878-4	Quartz (SiO_2) substance with a Community workplace exposure limit	≥0-≤0.1%

· **Additional information:**
For the wording of the listed hazard phrases refer to section 16.

Cements and cement-containing mixtures are finely ground mixes made up of clinker, gypsum (or other forms of calcium sulphate) and other special constituents (limestone, pozzolana, etc.).
For some types of cement and cement-containing mixtures, other components may be used as secondary

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constituents, e.g. grinding aids and reducing agents if needed, whose toxicological properties and risk levels are the same as or smaller than those of clinker.

SECTION 4: First aid measures

· **4.1 Description of first aid measures**
· **General information:** Take off contaminated clothing and wash it before reuse.
· **After inhalation:**
Supply fresh air and to be sure call for a doctor.
In case of unconsciousness place patient stably in side position for transportation.
· **After skin contact:**
Immediately wash with water and soap and rinse thoroughly.
If skin irritation continues, consult a doctor.
· **After eye contact:**
Protect unharmed eye.
Rinse opened eye for several minutes under running water. Then consult a doctor.
Do not rub the eyes to avoid possible damage to the cornea caused by rubbing.
· **After swallowing:**
Do not induce vomiting; call for medical help immediately.
Rinse out mouth and then drink plenty of water.

· **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.

· **4.3 Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

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SECTION 5: Firefighting measures

· **5.1 Extinguishing media**
· **Suitable extinguishing agents:** Use fire extinguishing methods suitable to surrounding conditions.

· **5.2 Special hazards arising from the substance or mixture**
Under certain fire conditions, traces of other toxic gases cannot be excluded.

· **5.3 Advice for firefighters**
· **Protective equipment:** Do not inhale explosion gases or combustion gases.
· **Additional information**
Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

SECTION 6: Accidental release measures

· **6.1 Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
Avoid formation of dust.
Ensure adequate ventilation

· **6.2 Environmental precautions:** Do not allow to enter sewers/ surface or ground water.

· **6.3 Methods and material for containment and cleaning up:**
Pick up mechanically.
Never use compressed air.
In the case of wet cement: remove the still wet cement and place it in a container. Allow the material to dry and solidify before disposing of it.
Dispose contaminated material as waste according to section 13.

· **6.4 Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

SECTION 7: Handling and storage

· **7.1 Precautions for safe handling**
Keep receptacles tightly sealed.
Wear suitable respiratory protective device when decanting larger quantities without extractor facilities.
Prevent formation of dust.
Provide suction extractors if dust is formed.
· **Information about fire - and explosion protection:**
The product is not flammable.

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No special measures required.

· **7.2 Conditions for safe storage, including any incompatibilities**
· **Storage:**
· **Requirements to be met by storerooms and receptacles:**
Store in a cool location.
Unsuitable material for receptacle: aluminium.
· **Information about storage in one common storage facility:** Do not store together with acids.
· **Further information about storage conditions:**
Store in dry conditions.
Protect from humidity and water.
Protect from heat and direct sunlight.
Keep container tightly sealed.

· **7.3 Specific end use(s)** No further relevant information available.

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SECTION 8: Exposure controls/personal protection

· **8.1 Control parameters**

· **Ingredients with limit values that require monitoring at the workplace:**	
CAS: 65997-15-1 Cement, portland, chemicals	
AGW (Germany)	Long-term value: 5 E mg/m³ DFG
WEL (Great Britain)	Long-term value: 10* 4** mg/m³ *inhalable dust **respirable dust
TWA (Italy)	Long-term value: 1 mg/m³ (e, j), A4
PEL (USA)	Long-term value: 50 mppcf or 15* 5** mg/m³ *total dust **respirable fraction
REL (USA)	Long-term value: 10* 5** mg/m³ *total dust **respirable fraction
TLV (USA)	Long-term value: 1* mg/m³ E; *as respirable fraction, A4
CAS: 14808-60-7 Quartz (SiO_2)	
BOELV (EU)	Long-term value: 0.1* mg/m³ *respirable fraction
MAK (Germany)	alveolengängige Fraktion
VLEP (France)	Long-term value: 0.1 mg/m³ pour la fraction alvéolaire
EOL (Great Britain)	Long-term value: 0.1 mg/m³
TWA (Italy)	Long-term value: 0.025 mg/m³ A2, (j)
PEL (USA)	Long-term value: 0.05* mg/m³ *resp. dust; 30mg/m3/%SiO2+2
REL (USA)	Long-term value: 0.05* mg/m³ *respirable dust; See Pocket Guide App. A
TLV (USA)	Long-term value: 0.025* mg/m³ *respirable particulate matter, A2

· **Regulatory information**
VLEP (France): ED 1487 26.04.2024
TWA (Italy): Valori Limite di Soglia (ACGIH)
PEL (USA): Guide to Occupational Exposure Values (OSHA PELs)
REL (USA): Guide to Occupational Exposure Values (NIOSH RELs)
TLV (USA): Guide to Occupational Exposure Values (TLV)
AGW (Germany): TRGS 900
WEL (Great Britain): EH40/2020
BOELV (EU): EU 2022/431
MAK (Germany): MAK- und BAT-Liste

· **DNELs**		
CAS: 544-17-2 calcium diformate		
Oral	DNEL / Long term exposure - Systemic effects	23.9 mg/Kg bw/d (general population)
Dermal	DNEL / Long term exposure - Systemic effects	2,390 mg/Kg bw/d (general population)

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		4,780 mg/Kg bw/d (workers)
	DNEL / Long term exposure - Local effects	8.3 mg/Kg (general population)
		16.7 mg/Kg (workers)
	DNEL / Short term exposure - Systemic effects	2,390 mg/Kg (general population)
		4,780 mg/Kg (workers)
	DNEL / Short term exposure - Local effects	8.3 mg/Kg (general population)
		16.7 mg/Kg (workers)
Inhalative	DNEL / Long term exposure - Systemic effects	83.2 mg/m³ (general population)
		337 mg/m³ (workers)
	DNEL / Short term exposure - Systemic effects	83.2 mg/m³ (general population)
		337 mg/m³ (workers)

· **PNECs**

CAS: 544-17-2 calcium diformate

PNEC / water	2 mg/l (freshwater)
	10 mg/l (intermittent releases)
	0.2 mg/l (marine water)
PNEC / sediment	13.4 mg/Kg dw (freshwater)
	1.34 mg/Kg dw (marine water)
PNEC / soil	1.5 mg/Kg dw
PNEC / STP	2.21 mg/l (sewage treatment plant)

· **Additional information:** The lists valid during the making were used as basis.

· **8.2 Exposure controls**
· **Appropriate engineering controls** No further data; see section 7.
· **Individual protection measures, such as personal protective equipment**
· **General protective and hygienic measures:**
The usual precautionary measures are to be adhered to when handling chemicals.
Do not eat or drink while working.
Keep away from tobacco products.
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.
Avoid contact with the eyes and skin.

For each Process Category (PROC), users can choose between options A) and B) below, depending on what is most appropriate to their specific situation.If an option is chosen, it must be selected in the choice of respiratory protection device.
Where cement is handled, conveyed, loaded, unloaded and stored, appropriate engineering measures shall be taken to protect the workers' health and to minimise dust propagating in the work environment. Localized controls shall be defined in relation to existing conditions and the corresponding special equipment for respiratory protection shall be identified.

Exposure scenario	PROC	Exposure	Localised controls	Efficiency
Industrial uses of dry hydraulic building and construction materials (indoor, outdoor)	26	Duration is not restricted (up to 480 minutes per shift, 5 shifts a week)	A. Not required or B. generic local exhaust ventilation	- 78%
	5, 8b		Generic local exhaust ventilation	78%
Industrial uses of wet suspension of hydraulic building and construction materials	5, 8b		Not required	-
Professional use of dry hydraulic building and construction materials (indoor, outdoor)	26		A. Not required or B. generic local exhaust ventilation	- 72%
	5, 8a, 8b		Generic local exhaust ventilation	72%
	19 (#)	(#) <240 minutes	Localised controls are not applicable, process only in well-ventilated rooms or outdoors	-
Professional use of wet suspensions of hydraulic building and construction materials	5, 8a, 8b, 19		Not required	-

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· **Respiratory protection:**



In case of insufficient ventilation or risk of dust inhalation, it can be used a facemask with a dust filter.

The personal protective equipment (PPE), defined as a function of local controls and assessed for a DNEL value = 1 mg/m³, is specified below.

Exposure scenario	PROC	Exposure	Specification of respiratory protective equipment (RPE)	RPE efficiency - assigned protection factor (APF)
Industrial uses of dry hydraulic building and construction materials (indoor, outdoor)	26	Duration is not restricted (up to 480 minutes per shift, 5 shifts a week)	A. P2 mask (FF) or B. P1 mask (FF)	APF = 10 APF = 4
	5, 8b		P2 mask (FF)	APF = 10
Industrial uses of wet suspension of hydraulic building and construction materials	5, 8b		Not required	-
Professional use of dry hydraulic building and construction materials (indoor, outdoor)	26		A. P3 mask (FF) or B. P2 mask (FF)	APF = 20 APF = 10
	5, 8a, 8b		P3 mask (FF)	APF = 20
	19 (#)	(#) <240 minutes	P3 mask (FF)	APF = 20
Professional use of wet suspensions of hydraulic building and construction materials	5, 8a, 8b, 19		Not required	-

A review of the APFs of the different respiratory protection equipment (RPE), according with EN 529: 2005, can be consulted in the MAESE methodology glossary.

· **Hand protection**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Wear gloves for the protection against mechanical hazards according to EN 388.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· **Material of gloves**
Neoprene gloves
Nitrile rubber, NBR
Polyurethane
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· **Penetration time of glove material**
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye/face protection**



Tightly sealed goggles

· **Body protection:** Alkaline resistant protective clothing

SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**
· **General Information**

· **Physical state**	Solid
· **Colour:**	White/Gray
· **Odour:**	Odourless

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· **Odour threshold:**	Not determined.
· **Melting point/freezing point:**	>825 °C
· **Boiling point or initial boiling point and boiling range**	Not applicable. >825°C
· **Flammability**	Non-flammable mixture
· **Lower and upper explosion limit**	
· **Lower:**	Not applicable. The product is solid.
· **Upper:**	Not applicable. The product is solid.
· **Flash point:**	Not applicable. The product is solid.
· **Auto-ignition temperature:**	Not applicable. The product is solid.
· **Decomposition temperature:**	Not applicable. Mixture is not self-reactive, does not contail organic peroxide and does not decompose under foreseen conditions of use
· **pH at 20 °C**	11-13.5 (sol. 40%)
· **Viscosity:**	
· **Kinematic viscosity**	Not applicable.
· **Solubility**	
· **water:**	Slightly soluble.
· **Partition coefficient n-octanol/water (log value)**	Not applicable. The product is a mixture of inorganic substances.
· **Vapour pressure:**	Not applicable.
· **Density and/or relative density**	
· **Density:**	Not determined.
· **Bulk density at 20 °C:**	1.6-1.8 g/cm³
· **Vapour density**	Not applicable.
· **Relative gas density**	Not applicable.
· **Particle characteristics**	Main particle size: 5-400 µm
· **9.2 Other information**	
· **Appearance:**	
· **Form:**	Solid Like powder
· **Important information on protection of health and environment, and on safety.**	
· **Ignition temperature:**	Product is not selfigniting.
· **Explosive properties:**	Product does not present an explosion hazard.
· **Change in condition**	
· **Evaporation rate**	Not applicable.
· **Information with regard to physical hazard classes**	Void

SECTION 10: Stability and reactivity

· **10.1 Reactivity**
When mixed with water, cement-containing mixes will harden into a stable mass that is not reactive in normal environments.
Cement reacts with water to form silicates and calcium hydroxide. Silicates in cement react with powerful oxidizers such as fluorine, boron trifluoride, chlorine trifluoride, manganese trifluoride and oxygen difluoride.

· **10.2 Chemical stability**
· **Thermal decomposition / conditions to be avoided:**
No decomposition if used and stored according to specifications.
Store in dry conditions.

· **10.3 Possibility of hazardous reactions** Reacts with base metals forming hydrogen.

· **10.4 Conditions to avoid** Humid conditions during storage may cause lump formation and loss of product quality.

· **10.5 Incompatible materials:**
Aluminum and non-noble metals
Ammonium salts
Acids

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· **10.6 Hazardous decomposition products:**
When in contact with hydrofluoric acid, cement dissolves to produce corrosive silicon tetrafluoride gas.

SECTION 11: Toxicological information

· **11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**
· **Acute toxicity** Based on available data, the classification criteria are not met.

· **LD/LC50 values relevant for classification:**		
CAS: 544-17-2 calcium diformate		
Oral	LD50	>2,000 mg/kg (rat)
Dermal	LD50	>2,000 mg/kg (rat)
Inhalative	LC50 / 4h	670 mg/m³ (rat)

· **Primary irritant effect:**
· **Skin corrosion/irritation**
Cement and cement-containing mixtures in contact with wet skin may cause thickening, cracking or fissuring of the skin. Prolonged contact in combination with abrasion may cause severe burns. Some individuals may develop eczema upon exposure to wet cement dust, caused by high pH, which induces irritative contact dermatitis after prolonged contact.
· **Serious eye damage/irritation**
Cement caused a mix picture of corneal effects and the calculated irritation index was 128.
Direct contact with cement and cement-containing mixtures may cause corneal damage by mechanical stress, immediate or delayed irritation or inflammation. Direct contact with large amounts of dry cement or splashes of wet cement may cause effects ranging from moderate eye irritation (e.g. conjunctivitis or blepharitis) to chemical burns and blindness.
· **Respiratory or skin sensitisation**
Some individuals may develop eczema upon exposure to wet cement dust, caused by an immunological reaction to soluble Cr (VI), which elicits allergic contact dermatitis. The response may appear in a variety of forms ranging from a mild rash to severe dermatitis. If the cement contains a soluble Cr(VI)-reducing agent and as long as the mentioned period of effectiveness of the chromate reduction is not exceeded, a sensitising effect is not expected.
There is no indication of sensitisation of the respiratory system.
· **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
· **Carcinogenicity** Based on available data, the classification criteria are not met.
· **Reproductive toxicity** Based on available data, the classification criteria are not met.
· **STOT-single exposure**
Cement dust may irritate the throat and respiratory tract. Coughing, sneezing and shortness of breath may occur following exposures in excess of occupational exposure limits. Overall, the evidence gathered clearly indicates that occupational exposure to cement dust has produced deficits in respiratory function. However, evidence available at the present time is insufficient to establish with any confidence the dose-response relationship for these effects.
· **STOT-repeated exposure**
There is an indication of COPD (Chronic Obstructive Pulmonary Disease). The effects are acute and due to high exposures. No chronic effects or effects at low concentration have been observed.
Based on available data, the classification criteria are not met.
· **Aspiration hazard** Based on available data, the classification criteria are not met.
· **11.2 Information on other hazards**

· **Endocrine disrupting properties**
None of the ingredients is listed.

SECTION 12: Ecological information

· **12.1 Toxicity**

· **Aquatic toxicity:**	
CAS: 544-17-2 calcium diformate	
EC50 / 48h	>1,000 mg/l (daphnia)
LC50 / 96h	>1,000 mg/l (fish)
NOEC / 21d	100 mg/l (crustacea - Daphnia magna)

· **12.2 Persistence and degradability** No further relevant information available.

· **12.3 Bioaccumulative potential** No further relevant information available.

· **12.4 Mobility in soil** No further relevant information available.

· **12.5 Results of PBT and vPvB assessment**
· **PBT:** Not applicable.
· **vPvB:** Not applicable.

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· **12.6 Endocrine disrupting properties** The product does not contain substances with endocrine disrupting properties.

· **12.7 Other adverse effects**
· **Additional ecological information:**
· **General notes:**
Must not reach sewage water or drainage ditch undiluted or unneutralised.
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

SECTION 13: Disposal considerations

· **13.1 Waste treatment methods**
· **Recommendation**
Disposal must be made according to official regulations.
Must not be disposed together with household garbage. Do not allow product to reach sewage system.

· **Uncleaned packaging:**
· **Recommendation:** Disposal must be made according to official regulations.

SECTION 14: Transport information

· **14.1 UN number or ID number**	
· **ADR/RID/ADN, ADN, IMDG, IATA**	Void
· **14.2 UN proper shipping name**	
· **ADR/RID/ADN, ADN, IMDG, IATA**	Void
· **14.3 Transport hazard class(es)**	
· **ADR/RID/ADN, ADN, IMDG, IATA**	
· **Class**	Void
· **14.4 Packing group**	
· **ADR/RID/ADN, IMDG, IATA**	Void
· **14.5 Environmental hazards:**	
· **Marine pollutant:**	No
· **14.6 Special precautions for user**	Not applicable.
· **14.7 Maritime transport in bulk according to IMO instruments**	Not applicable.
· **UN "Model Regulation":**	Void

SECTION 15: Regulatory information

· **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
Regulation (EC) No 1907/2006 (REACH - Registration, Evaluation, Authorisation and Restriction of Chemicals)
Regulation (EC) No 1272/2008 (CLP - Classification, Labelling and Packaging of substances and mixtures)
Compilation of Safety Data Sheet: Reg.UE n. 878/2020 (amending Reg.EC n.1907/2006, Annex II)

According to Annex XVII, Point 47, under Regulation (EC) No. 1907/2006 (REACH) as amended by Regulation No. 552/2009, cement and cement-containing mixtures shall not be placed on the market or used if they contain, after mixing with water, more than 0.0002% (2 ppm) of soluble chromium (VI) of the total dry weight of the cement.
Compliance with this threshold limit is ensured through the introduction of a reducing agent into the preparation, the effectiveness of which is guaranteed for a certain period of time and the maintenance of the appropriate storage conditions.
Within the meaning of the above-mentioned Regulation, the following information shall be provided when reducing agents are used:
- DATE OF PACKAGING
Clearly declared on the bag or on the delivery documents.
- STORAGE CONDITIONS (for maintaining the activity of the reducing agent)
In adequate tightly closed containers, within a cool, dry and not ventilated area, whilst preserving integrity of the packages
- SHELF LIFE (for maintaining the activity of the reducing agent)
As stated on the delivery documents (for both bag and bulk products) as well as on each bag.
Declared shelf life refers exclusively to the period during which the reducing agent is effective in keeping the content of soluble chromium VI, subject to the limitations of use of the mixture dictated by the general rules of storage and use of the product itself.

Cement is a mixture and, as such, is not subject to REACH registration. Portland cement is a substance and it is exempt

(Contd. on page 10)

Safety data sheet (English translation without any country-specific legislation)
according to Regulation (EC) No 1907/2006, Article 31

Printing date 20.03.2025 Rev. 3 (replaces version 2) Revision: 20.03.2025

Trade name: X-FIX

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from registration pursuant to article 2.7 (b) and Annex V.10 of REACH, but subject to notification (Notification No. 02-2119682167-31-0000 - Update notification dated 1/7/2013 - Presentation Report No. QJ420702-40).

· **REACH**
· **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 47

· **Directive 2012/18/EU**
· **Named dangerous substances - ANNEX I** None of the ingredients is listed.

· **REGULATION (EC) No 273/2004 on drug precursors**
None of the ingredients is listed.

· **REGULATION (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors**
None of the ingredients is listed.

· **REGULATION (EU) 2019/1148**

· **Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))**
None of the ingredients is listed.

· **Annex II - REPORTABLE EXPLOSIVES PRECURSORS**
None of the ingredients is listed.

· **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

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SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Relevant phrases**
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H335 May cause respiratory irritation.

· **Classification according to Regulation (EC) No 1272/2008**	
Skin corrosion/irritation Serious eye damage/irritation Skin sensitisation Specific target organ toxicity (single exposure)	The classification of the mixture is generally based on the calculation method using substance data according to Regulation (EC) No 1272/2008.

· **Contact:** Litokol Lab S.p.A.
· **Version number of previous version:** 2
· **Abbreviations and acronyms:**
REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals
CLP: Classification, Labelling and Packaging
TLV: Threshold Limit Value
TLV-TWA: Threshold Limit Value - Time Weighted Average
TLV-STEL: Threshold Limit Value - Short Term Exposure Limit
PEL: Permissible Exposure Limits (Limiti di esposizione consentiti)
REL: Recommended Exposure Limits (Limiti di esposizione raccomandati)
IOELV: Indicative Occupational Exposure Limit Value
WEELs: Workplace Environmental Exposure Limits (Limiti di esposizione ambientale sul posto di lavoro)
BEI: Biological Exposure Indices
LC50: Lethal Concentration, 50 percent
EC50: Effective Concentration, 50 percent
ErC50: Effective Concentration, 50 percent, reduction of growth rate
NOEC: No-Observed Effect Concentration
NOELR: No-Observed Effect Loading Rate
ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
DNEL: Derived No-Effect Level (REACH)
PNEC: Predicted No-Effect Concentration (REACH)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
ATE: Acute toxicity estimate values
Skin Irrit. 2: Skin corrosion/irritation – Category 2
Eye Dam. 1: Serious eye damage/eye irritation – Category 1
Skin Sens. 1: Skin sensitisation – Category 1
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
· *** Data compared to the previous version altered.**