1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Trade name: EXPANCRETE
Product type and use: Expanding agent for preparing shrink controlled mortars.
Supplier:
MAPEI S.p.A. - Via Cafiero 22 - Milan - ITALY
Emergency telephone number of the company and/or of an authorised advisory centre:
MAPEI S.p.A. - Tel. +(39)02376731
Poison Centre - Ospedale di Niguarda - Milan - Tel. +39/02/66101029
Competent person responsible for the safety data sheet:
sicurezza@mapei.it

2. HAZARDS IDENTIFICATION

Properties / Symbols:
- Xi Irritant

R Phrases:
- R41 Risk of serious damage to eyes.

If brought into contact with the eyes, the product causes serious eye injury, such as opacity of the cornea or lesions to the iris.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous components within the meaning of EEC directive 67/548 and corresponding classification:
90% - 100% calcium oxide
Xi; R41

4. FIRST AID MEASURES

Contact with skin:
- Immediately take off all contaminated clothing.
- Areas of the body that have - or are only even suspected of having - come into contact with the product must be rinsed immediately with plenty of running water and possibly with soap.

Contact with eyes:
- Wash immediately and thoroughly with running water, keeping eyelids raised, for at least 10 minutes. Following this, protect the eyes with sterile gauze or a clean, dry, handkerchief.
- OBTAIN A MEDICAL EXAMINATION.
- Do not use eyewash or ointment of any kind before obtaining an examination or advice from an ophthalmologist.

Swallowing:
- Induce vomiting. SEEK A MEDICAL EXAMINATION IMMEDIATELY and present the safety-data sheet.
- Wash the mouth thoroughly and drink plenty of water. In case of disease consult a physician immediately and present this safety-data sheet.

Inhalation:
- Ventilate the premises. The patient is to be removed immediately from the premises.
contaminated and made to rest in a well ventilated area. Should the patient feel unwell, consult a physician.

5. FIRE-FIGHTING MEASURES
   The product does not present a fire hazard
   Extinguishers not to be used:
      None in particular.
   The original ingredients or unidentified toxic and/or irritant compounds may be present in the combustion fumes.
   Avoid inhaling the fumes.

6. ACCIDENTAL RELEASE MEASURES
   Measures for personal safety:
      Use a mask, gloves and protective clothing.
   Environmental measures:
      None in particular.
      If the product has escaped into a water course, into the drainage system, or has contaminated the ground or vegetation, notify the competent authorities.
   Cleaning methods:
      Rapidly recover the product, wearing protective clothing.
      Scoop into containers and seal for disposal.
      After the product has been recovered, rinse the area and materials involved with water.

7. HANDLING AND STORAGE
   Handling precautions:
      Avoid contact with skin and eyes and exposure to high dust concentration.
      Avoid powder development and deposit
   Incompatible materials:
      None in particular.
   Storage conditions:
      Always keep the containers tightly closed.
   Instructions as regards storage premises:
      Adequately ventilated premises.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION
   Precautionary measures:
      Give adequate ventilation to the premises where the product is stored and/or handled.
   Respiratory protection:
      Not needed for normal use.
      A dust mask should be worn if above exposure limits.
   Protection for hands:
      Not needed for normal use.
   Eye protection:
      Safety goggles.
   Protection for skin:
      No special precaution must be adopted for normal use.
      Personal Protective Equipment should comply with relevant CE standards (as EN 374 for gloves and EN 166 for goggles), correctly maintained and stored. Consult the supplier to check the suitability of equipment against specific chemicals and for user information.

   Exposure limit value of single components:
      calcium oxide
         TLV TWA:: 2 mg/m3

   Carry out the control of the concentrations of the substances with exposure limits assigned, in
9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: powder
Colour: white
Odour: odourless
pH: N.A.
\( \text{pH(water dispersion,10\%):} \) 12.5
Melting point: N.A.
Boiling point: \( \equiv \) °C
Flash point: \( \equiv \) °C
Solid/gas flammability: N.A.
Autoignition temperature: \( \equiv \) °C
Explosion limits(by volume): \( \equiv \)
Oxidizing properties: N.A.
Vapour pressure: N.A.
Relative density: N.A.
Solubility in water: partly soluble
Lipid solubility: insoluble
Viscosity: N.A.
Vapour density (air=1): N.A.

10. STABILITY AND REACTIVITY

Conditions to avoid:
Stable under normal conditions.

11. TOXICOLOGICAL INFORMATION

Route(s) of entry:
- Ingestion: Yes
- Inhalation: Yes
- Contact: No

Toxicological information related to the product:
No toxicological data are available at the moment on the product itself. There is no toxicological data available on the mixture. Consider the individual concentration of each component to assess toxicological effects resulting from exposure to the mixture. The product does not contain toxicologically relevant substances.

Corrosive/Irritating Properties:
- Skin: The product can cause a temporary irritation by prolonged contact.
- Eye: The product can cause damage to eyes by contact

Sensitizing Properties:
No effects are known.

Cancerogenic Effects:
No effects are known.

Mutagenic Effects:
No effects are known.

Teratogenic Effects:
No effects are known.
During the use of the product it is released a small amount of acetic acid (CAS 64-19-7), that can cause mucous and skin irritation.

12. ECOLOGICAL INFORMATION

Biodegradability: no data available on the preparation.
Aquatic toxicity: the preparation is not to be considered toxic to the aquatic environment based on components.
LC50>100mg/l - aquatic species (calculated data following 1999/45/EC Directive).
Adopt good industrial practices, so that the product is not released into the environment.

13. DISPOSAL CONSIDERATIONS

Recover if possible. In so doing, comply with the local and national regulations currently in force.
Where applicable, refer to the following regulatory provisions: 91/156/EEC, 91/689/EEC, 94/62/EC and subsequent amendments.
Disposal of not hardened product (EC waste code): 06 02 05
The suggested European waste code is just based on the composition of the product.
According to the specific process or application field a different waste code may be necessary.

14. TRANSPORT INFORMATION

UN Number: ==
Rail/Road(RID/ADR): no dangerous good
Sea (IMO/IMDG): no dangerous good
MAR/POL 73/78, Annex III: No
Air (ICAO/IATA): no dangerous good

15. REGULATORY INFORMATION

Symbols:
Xi Irritant
R Phrases:
R41 Risk of serious damage to eyes.
S Phrases:
S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S39 Wear eye/face protection.
Contents:
calcium oxide

16. OTHER INFORMATION

Main bibliographic sources:
NIOSH - Registry of toxic effects of chemical substances
Istituto Superiore di Sanità - Inventario Nazionale Sostanze Chimiche
ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre,

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Commission of the European Communities
ACGIH - Threshold Limit Values - 2004 edition
SAX’S - Dangerous properties of industrial materials

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality. It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This MSDS cancels and replaces any preceding release.
Text of R phrases referred to under heading 3:
R41 Risk of serious damage to eyes.

Paragraphs modified from the previous revision:

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING
2. HAZARDS IDENTIFICATION
3. COMPOSITION/INFORMATION ON INGREDIENTS
6. ACCIDENTAL RELEASE MEASURES
7. HANDLING AND STORAGE
8. EXPOSURE CONTROLS/PERSONAL PROTECTION
9. PHYSICAL AND CHEMICAL PROPERTIES
11. TOXICOLOGICAL INFORMATION
12. ECOLOGICAL INFORMATION
13. DISPOSAL CONSIDERATIONS
14. TRANSPORT INFORMATION
15. REGULATORY INFORMATION