SAFETY INFORMATION SHEET

1. Identification of the preparation and its producer

1.1. Identification of the preparation

BENFERFLEX RAPIDO GRIGIO

1.2. Use of the substance/preparation

Product for professional use.

Cement-based quick-setting adhesive for ceramic

tiles.

1.3. Identification of the company/enterprise

Benfer Chimica S.r.I. Via Provinciale Est, 6 40053 Bazzano (BO) – Italy phone +39-051-83.12.73 fax +39-051-83.15.84

1.4. Emergency phone number

Centro antiveleni (Antidote Centre) c/o Ospedale

Maggiore di Bologna (Bologna Hospital)

phone +39-051-647.89.55 +39-051-647.81.11

2. Composition/information on the ingredients

2.1 Hydraulic cement containing cement, sand, calcium carbonate, cellulose and aggregate.

2.2 Not pertinent

2.3~2.6

	quantity	CAS number	EINECS number	classification
Calcium hydroxide	1-10%	1305-65-0	215-137-3	C, R43-41

The preparation contains no other hazardous substances in accordance with Directive 67/548/EEC and foll. amdt. and suppl., but becomes irritant in the presence of water as this solution is highly alkaline (high pH due to the formation of hydroxides of calcium, potassium and sodium). Furthermore, this solution may also contain modest quantities of hydrosoluble chromium (VI) salts which, following the addition of reducing agents, are maintained at concentrations of less than 0.0002% (2 ppm) of the total dry weight of the cement, providing this is correctly stored (see part 7.2)

and used within the storage period specified on the packaging. Said expiry date relates to the

preservation of the efficacy of the reducing agent.

3. Identification of hazards

- The dust of the preparation can have an irritating effect for the eyes, respiratory tract (with irritation
 of the upper tract) and mucous membranes. In addition it may be irritating for the skin in the event
 of prolonged contact.
- Mixes containing cement, because of its high pH, may cause irritation of the skin when the contact is repeated or extended and lesions to the eyes if splashed.
- If substantial amounts are swallowed, cement can cause ulceration of the digestive system.
- The preparation and its mixes present no particular risks for the environment, subject to compliance with the recommendations of the following points 6, 8, 12 and 13.

4. First aid

4.1. Inhalation

Take outdoors and call a doctor if any trouble arises.

4.2. Contact with the skin

If the skin reddens, carefully wash the affected area with soap and plenty of water; if the cutaneous reaction is extended, call a doctor.

4.3. Contact with the eyes

Don't rub, rinse carefully with plenty of water with the eyelids open; call a specialist doctor.

4.4. Swallowing

Rinse the mouth with plenty of water and call a doctor.

5. Fire-fighting

5.1. Extinguishers

Any

5.2. Extinguishers NOT to use

None

5.3. Safe extinguishers

Any

5.4. Recommended equipment

Any

6. Action in case of accidental spillage

6.1. Precautions for people

Avoid contact with the eyes and skin, do not breathe in the dust. If handling with the spread of dust, prepare the necessary Individual Safety Devices against contact with the eyes (goggles), against contact with the skin (gloves, work clothes) and against inhalation and ingestion (filtering or dustproof face masks)

6.2. Precautions for the environment

In case of accidental spillage, sweep up the preparation with a dry extractor before it gets into any drain water circuits or surface bodies.

6.3. Clearing methods

Dry extractor.

7. Handling and storage

7.1. Handling

Avoid action causing the spread of dust. Use suitable Individual Safety Devices (goggles, face masks, gloves).

7.2. Storage

Keep in closed and identified containers out of the reach of children, in a dry place, away from acids, without spilling any powder.

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The integrity of the packaging and compliance with storage methods are indispensable conditions for maintaining the efficacy of the reducing agent throughout the storage period specified on the packaging.

8. Personal protection/exposure control

8.1. Threshold limit values of the components

single Threshold limit value - weighted mean over time TLV-TWA American Conference of Governmental Industrial Hygienists (ACGIH 2003):

Calcium hydroxide 5 mg/m3

Potassium hydroxide 2 mg/m³ (TLV-C)

Sodium hydroxide 2 mg/m³ (TLV-C)
Portland Cement 10 mg/m³ (inhalable fraction) 3 mg/m³ (breathable fraction)

chromium VI (insoluble compounds) as Cr 0.01 mg/m³

chromium VI (water soluble compounds) as Cr 0.05 mg/m³

8.2. Exposure control

Use the preparation in open environments. If used in a closed room, ventilate the room or use extractor systems designed to reduce the exposure of the operator to the dust to a minimum.

8.2.1.1. Respiratory protection

Filtering and/or dustproof face masks

8.2.1.2. Protection of the hands

Use waterproof gloves suited to handling alkaline

substances

8.2.1.3. Protection of the eyes

Wear safety goggles

8.2.1.4. Protection of the skin

Work clothes, preferably disposable ones.

8.2.2. Environmental exposure control

Check for compliance with the limits of exposure stated in § 8.1.

9. Physical and chemical properties

9.1. General information

dusty, grey solid smell: none

9.2. Important information on human health, safety

and the environment

pH in aqueous solution Boiling point

Flash point

Flammability (solid, gas) Explosive properties

12.45

> 1000 °C non-flammable

none

Combustion properties

Vapour pressure

Density

Solubility in water

Fat-solubility

Coefficient of n-octanol/water division Viscosity

Vapour density

Speed of evaporation

none

not applicable

1.0 ~ 1.5 g/cc

it forms saturated solutions of calcium hydroxide

insoluble

not applicable

not applicable

not applicable

not applicable

10. Stability and reactivity

10.1 Conditions to avoid

Avoid contact with acids.

10.2 Materials to avoid

Acids (pH < 7) since an exothermic reaction (with

heat generation) is created.

10.3 Hazardous products of decomposition

None

11. Toxicological information

The components of the preparation may:

- <u>by inhalation</u> cause irritation to the respiratory tract and inflammation of the mucous membranes of the nose,
- by swallowing cause ulceration of the mouth, oesophagus and stomach,
- on damp skin cause irritation in case of prolonged contact
- in contact with the eyes cause irritation of the eyelids and cornea and injury to the eyeballs.

Live animal studies have shown that there is no acute toxicity on the derma.

12. Ecological information

12.1 Eco-toxicity

Effects of eco-toxicity are possible only in the case of spillage of large amounts in the presence of water. The preparation must be used according to good working practice, avoiding leakage into the

environment.

12.2 Mobility

Not pertinent

12.3. Persistence and degradability

Not pertinent

12.4. Potential of bio-accumulation

Not pertinent

13. Remarks on disposal

Comply with the current standards for the recovery/disposal of special waste – Italian legislative decree D.Lgs.22/97 and associated orders.

14. Information on transport

The preparation doesn't come under any class of hazard for the transport of hazardous goods. Use closed containers.

15. Information on regulations

The product has been classified as an **irritant** under D. Lgs. 65/2003 "Attuazione delle direttive 1999/45/CE e 2001/60/CE relative alla classificazione, all'imballaggio e all'etichettatura dei preparati pericolosi" ("Implementation of directives 1999/45/CE and 2001/60/CE relating to the classification, packaging and labelling of dangerous compounds").

Furthermore, this solution may also contain modest quantities of hydrosoluble chromium (VI) salts which, following the addition of reducing agents, are maintained at concentrations of less than 0.0002% (2 ppm) of the total dry weight of the cement, providing this is correctly stored (see part 7.2) and used within the storage period specified on the packaging.

Observance of said threshold limit for a predefined period of time and with guaranteed compliance with adequate storage methods (see part 7.2) ensures the preparation's conformity to the provisions of the Ministerial Decree of 10/05/2004 "Implementation of EU directive 2003/53/CE". Pursuant to the aforesaid decree, with the use of a reducing agent, the following information must be provided

- · Packaging date: indicated on the packaging
- · Storage conditions: in closed packets and in a cool, dry place
- Storage period: specified on the packaging

16. Other information

Revision 1 modifies standard references used in the preparation of this sheet (D.M.07.09.2002) and for the classification of the compound (D. Lgs. 65/2003).

This safety information sheet has been drawn up in conformity with Italian ministerial order D.M. 7th September 2002.

The user must make sure of the fitness and completeness of such information in relation to its specific use. This sheet annuls and replaces every preceding edition.

The listing of the legislative references must not be considered exhaustive; it is for the user of the product to refer to the provisions of existing laws for the relevant use, storage and handling, for which the user is to be considered the only person responsible.

Where applicable, reference is made to the following provisions of the law (and following amendments) on the subject of safety and environmental protection:

Italian presidential decree DPR 547/55 Standards for the prevention of accidents at work

Italian presidential decree DPR 303/56 General standards for hygiene at work

Italian legislative decree D.Lgs.152/99 Standards for the protection of water from pollution Italian presidential decree DPR203/88 Atmospheric pollution generated by industrial plants

Italian legislative decree D.Lgs.22/97 Implementation of EEC directives on the subject of waste

Italian legislative decree D.Lgs.626/94 Implementation of EEC directives on the improvement of worker safety at the workplace

Italian legislative decree D.Lgs.25/02 Implementation of EEC directives concerning worker protection against the risks deriving from chemical agents during work

TLV (Threshold Limit Value) concentration of a substance (in the air) to which it is believed that nearly all the workers may be exposed, repeatedly day after day, without suffering any damage to their health. It is expressed in mg of substance in m³ of air as a daily average within the eight hours (TLV-TWA) or, where specified, as an average over 15 minutes (STEL) or as an instant value (CEILING).

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Hazard symbol:

Xi (irritant)

Phrases of Risk:

R36/37/38

Irritating to eyes, respiratory system and skin

R41

Risk of serious damage to eyes

R43

May cause sensitization by skin contact

Cautionary tips:

S2

Keep out of the reach of children

S22

Do not breathe dust

S24/25 **S26**

Avoid contact with skin and eyes In case of contact with eyes, rinse immediately with plenty

of water and seek medical advice

S36/37/39

Wear suitable protective clothing, gloves and eye/face

protection.

S45

in case of accident or if you feel unwell, seek medical

advice immediately (show the label where possible).