Safety Data Sheet dated 01/09/2003

1. DESIGNATION OF PRODUCT AND COMPANY

Trade name: : FILL parte A Product type and use: Acid-resistant epoxy grout and adhesive for ceramic tiles. Supplier: BISAZZA S.p.A - Via Milano, 56- 36041 Alte - Vicenza Emergency telephone number of the company and/or of an authorised advisory centre: BISAZZA S.p.A. - Tel. +39 0444 707511

Poison Centre - Ospedale di Niguarda - Milan - Tel. +39/02/66101029

2. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous components within the meaning of EEC directive 67/548 and corresponding classification: 12.5% - 19.99% reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700)

N. EEC/67/548: 603-074-00-8 CAS: 25068-38-6 EINECS: 500-033-5 N Xi R51/53 R36/38 R43

3% - 4.99% alkyl (C12-C14) glycidyl ether

N. EEC/67/548: 603-103-00-4 CAS: 68609-97-2 EINECS: 271-846-8 Xi R38 R43

1% - 2.49% Prodotto di reaz. Bisfenolo F-Epicloridrina

CAS: 9003-36-5 Xi N R36/38 R43 R51/53

3. HAZARDS IDENTIFICATION

If brought into contact with the eyes, the product causes irritation that may last for over 24 hours, and if brought into contact with the skin it causes significant inflammation with erythema, scabs, and oedema. If brought into contact with the skin, the product may cause sensitisation of the skin.

This preparation contains low molecular weight epoxy resins. Cross sensitisation to other epoxies is possible. Avoid also exposure to spray mist and vapour.

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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.
Swallowing:	A suspension of activated charcoal in water, or liquid petrolatum may be administered.
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

Recommended extinguishers:

Water, CO2, Foam, Chemical powders, according to the materials involved in the fire



Massures for personal safety:

Extinguishers not to be used:	None in particular.
Risks arising from combustion:	Avoid inhaling the fumes.
Protective equipment:	Use protection for the airways.

6. MEASURES IN CASE OF ACCIDENTAL RELEASE Lise a mask aloves and protective clothing

measures for personal surety.	ose a mask, gioves and protostive olothing.
Environmental measures:	Do not allow the product to contaminate drains and surface water. If the product has escaped into a water course, into the drainage system, or has contaminated the ground or vegetation, notify the competent authorities.
Spills:	Rapidly recover the product. To so do, wear 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 and inhalation of the vapours. See, too, paragraph 8 below. Do not eat or drink while working.
Incompatible materials:	Keep away from water or from damp surroundings.
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.
Protection for hands:	Use protective rubber gloves. Neoprene (0,5 mm) or nitril (0,4 mm) gloves are s uggested.
Eye protection:	Avoid contact with the eye.
Protection for skin:	Use clothing that provides comprehensive protection to the skin.

All the individual protection devices must be consistent to CE relevant standards (as EN 374 for gloves and EN 166 for goggles), maintained efficient and stored in a appropriate way. The life of the protection devices against the chemical agents depends on various factors (the way they are used, climatic factors and storage conditions), that can remarkably reduce also the life foreseen by CE standards. The consultation of the supplier of the protection devices is always recommanded. The education of the worker to the use of the equipment devices is mandatory.

Exposure limit value of single components: none

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	paste
Colour:	various
Odour:	typical
pH:	-
Boiling point:	-

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Flash point:	-
Autoignition temperature:	-
Explosion limits(by volume):	-
Vapour pressure:	0.01 kPa (23°C)
Relative density:	1.65 g/cm ³ (23°C)
Solubility in water:	insoluble
Lipid solubility:	soluble
Viscosity:	2000000 mPa.s (23°C)

10. STABILITY AND REACTIVITY

Conditions to avoid: stable u	under normal conditions.
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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. The concentration of each substance should be borne in mind in assessing the toxological effects deriving from the preparation.
Corrosive/ Irritating Properties:	Skin:The product can cause irritation by contact Eye: The product can cause irritation by contact
Sensitizing Properties:	Frequent skin contact may cause skin sensitization.
Cancerogenic Effects:	No effects are known.
Mutagenic Effects:	No effects are known.
Teratogenic Effects:	No effects are known.
Additional Information:	Liquid epoxy resin contained in this material causes only minor skin irritation. However, all epoxy resins are capable of causing sensitizing of the skin. Susceptibility to skin irritation and sensitization varies from person to person. In a sensitized individual the allergic dermatitis may not appear until after several days or weeks of frequent and prolonged contact. Therefore, even though the skin irritation potential is slight, skin contact should be avoided. Once sensitization has occurred, exposure of the skin to very small quantities of the material may cause erythema and edema.

12. ECOLOGICAL INFORMATION

Although no experimental data are available, the product is expected to be only partly biodegradable.

Adopt sound working practices, so that the product is not released into the environment. Do not pour leftover mix down drains or into surface water. Do not dump containers or dispose of then as normal refuse.

List of environmentally dangerous substances contained in this preparation and their classification: 12.5% - 19.99% reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700)

N. EEC/67/548: 603-074-00-8 CAS: 25068-38-6 EINECS: 500-033-5 R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

1% - 2.49% Prodotto di reaz. Bisfenolo F-Epicloridrina

CAS: 9003-36-5

R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

13. DISPOSAL CONSIDERATIONS

Recover if possible. In so doing, comply with the local and national regulations currently in force.Disposal of hardened product :08 04 10Disposal of not hardened product :08 04 09

14. TRANSPORT INFORMATION

UN Number:-Rail/Road(RID/ADR):no dangerous goodSea (IMO/IMDG):no dangerous goodMAR/POL 73/78,Annex III:NoAir (ICAO/IATA):no dangerous good

15. REGULATORY INFORMATION

Classification and Label	Iling according to EC Directive 99/45:
Symbols:	Xi Irritant
R Phrases:	R36/38 Irritating to eyes and skin.
	R43 May cause sensitization by skin contact.
	R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
S Phrases:	S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
	S60 This material and its container must be disposed of as hazardous waste.
	S61 Avoid release to the environment. Refer to special instructions/Safety data sheets.
	S24 Avoid contact with skin.
	S37 Wear suitable gloves.
Special Provisions:	Contains epoxy constituents. See information supplied by the manufacturer.
Contents:	Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) Reaction product: Bisfenolo F-Epicloridrina
	alkyl (C12-C14) glycidyl ether

16. OTHER INFORMATION

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.

To ensure correct use, the product must be stored, handled and utilized in accordance with current hygiene and safety standards

This MSDS cancels and replaces any preceding release.

Safety Data Sheet dated 01/09/2003



1. DESIGNATION OF PRODUCT AND COMPANY

Trade name: : FILL parte B Product type and use: Hardener for epoxy products. Supplier: BISAZZA S.p.A - Via Milano, 56- 36041 Alte - Vicenza Emergency telephone number of the company and/or of an authorised advisory centre: BISAZZA S.p.A. - Tel. +39 0444 707511

Poison Centre - Ospedale di Niguarda - Milan - Tel. +39/02/66101029

2. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous components within the meaning of EEC directive 67/548 and corresponding classification: 5% - 9.99% benzyl alcohol N. EEC/67/548: 603-057-00-5 CAS: 100-51-6 EINECS: 202-859-9 Xn R20/22

- 5% 9.99% 3-aminomethyl-3,5,5-trimethylcyclohexylamine N. EEC/67/548: 612-067-00-9 CAS: 2855-13-2 EINECS: 220-666-8 C R21/22 R34 R43 R52/53
- 1% 2.49% 3,6,9-triazaundecamethylenediamine N. EEC/67/548: 612-060-00-0 CAS: 112-57-2 EINECS: 203-986-2 C N R21/22 R34 R43 R51/53
- 1% 2.49% 3-aminopropyldimethylamine N. EEC/67/548: 612-061-00-6 CAS: 109-55-7 EINECS: 203-680-9 C R10 R22 R34 R43

3. HAZARDS IDENTIFICATION

If brought into contact with the eyes, the product causes irritation that may last for over 24 hours, and if brought into contact with the skin it causes significant inflammation with erythema, scabs, and oedema. If brought into contact with the skin, the product may cause sensitisation of the skin. Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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.
Swallowing:	A suspension of activated charcoal in water, or liquid petrolatum may be administered.
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

Recommended extinguishers:

Extinguishers not to be used: Risks arising from combustion: Protective equipment: Water, CO2, Foam, Chemical powders, according to the materials involved in the fire None in particular. Avoid inhaling the fumes. Use protection for the airways.

6. MEASURES IN CASE OF ACCIDENTAL RELEASE

Measures for personal safety: Use a mask, gloves and protective clothing.

Environmental measures: Do not allow the product to contaminate drains and surface water. If the product has escaped into a water course, into the drainage system, or has contaminated the ground or vegetation, notify the competent authorities.

> Rapidly recover the product. To so do, wear 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

Spills:

Handling precautions:	Avoid contact and inhalation of the vapours. See, too, paragraph 8 below. Do not eat or drink while working.
Incompatible materials:	None in particular.
Storage conditions:	Always keep the containers tightly closed.
Instructions as regards storage premises:	Adequately ventilated premises.

8 EXPOSURE CONTROL S/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.
Protection for hands:	Use protective rubber gloves. Neoprene (0,5 mm) or nitril (0,4 mm) gloves are s uggested.
Eye protection:	Avoid contact with the eye.
Protection for skin:	Use clothing that provides comprehensive protection to the skin.

All the individual protection devices must be consistent to CE relevant standards (as EN 374 for gloves and EN 166 for goggles), maintained efficient and stored in a appropriate way. The life of the protection devices against the chemical agents depends on various factors (the way they are used, climatic factors and storage conditions), that can remarkablly reduce also the life foreseen by CE standards. The consultation of the supplier of the protection devices is always recommanded. The education of the worker to the use of the equipment devices is mandatory.

Exposure limit value of single components: none

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:

liquid

Colour: Odour: pH: Melting point:	brown ammonia 11 -
Boiling point:	-
Flash point:	>100 °C
Autoignition temperature:	-
Explosion limits(by volume):	-
Vapour pressure:	<0.01 kPa (23°C)
Relative density:	1.1 g/cm³ (23°C)
Solubility in water:	partly soluble
Lipid solubility:	soluble
Viscosity:	900 mPa.s (23°C)

10. STABILITY AND REACTIVITY

Conditions to avoid: stable under normal conditions. It may generate flammable gases on contact with elementary metals (alkalis and alkaline earth) and powerful reducing agents.

It may generate toxic gases on contact with oxidising mineral acids, halogenated organic substances, organic peroxides and hydroperoxides, and powerful oxidising agents. It may catch fire on contact with powerful oxidising agents.

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. The concentration of each substance should be borne in mind in assessing the toxological effects deriving from the preparation.
Corrosive/	Skin:The product can cause irritation by contact
Irritating Properties:	Eye: The product can cause irritation by contact
Sensitizing Properties:	Frequent skin contact may cause skin sensitization.
Cancerogenic Effects:	No effects are known.
Mutagenic Effects:	No effects are known.
Teratogenic Effects:	No effects are known.
Additional Information:	Susceptibility to skin irritation and sensitization varies from person to person. In a sensitized individual the allergic dermatitis may not appear until after several days or weeks of frequent and prolonged contact. Therefore, even though the skin irritation potential is slight, skin contact should be avoided. Once sensitization has occurred, exposure of the skin to very small quantities of the material may cause erythema and edema.

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Although no experimental data are available, the product is expected to be only partly biodegradable.

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List of environmentally dangerous substances contained in this preparation and their classification: 5% - 9.99% 3-aminomethyl-3,5,5-trimethylcyclohexylamine

N. EEC/67/548: 612-067-00-9 CAS: 2855-13-2 EINECS: 220-666-8 R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

1% - 2.49% 3,6,9-triazaundecamethylenediamine

N. EEC/67/548: 612-060-00-0 CAS: 112-57-2 EINECS: 203-986-2 R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

13. DISPOSAL CONSIDERATIONS

Recover if possible. In so doing, comply with the local and national regulations currently in force. Disposal of hardened product : 08 04 10 Disposal of not hardened product : 08 04 09

14. TRANSPORT INFORMATION

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15. REGULATORY INFORMATION

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16. OTHER INFORMATION

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