

METZ 19V

EPOXY CEMENTS FOR VIBRATION FIXING OF TILES



DESCRIPTION:

Metz 19V comprises two products - a bedding cement and a grouting cement - that are specifically designed for use in the vibration fixing of ceramic tiles. Both products are water washable and exhibit high bond strength and good chemical resistance.

FEATURES AND BENEFITS:

- High Bond Strength
Excellent adhesion to concrete and ceramic tile.
- Chemical Resistant
Resist dilute acids and alkalis as well as most salts, oils and fats. Metz 19V Grouting has higher chemical resistance than most water washable epoxy grouts.
- Water Washable
Excess material can easily be cleaned from tiles and equipment by water rather than solvents.
- Solventless
100% solids formulations.
- Safe use
Low potential for allergic reactions commonly associated with epoxies.

RECOMMENDED:

For bedding and grouting tiles using the vibration fixing method in the following areas:

- Food processing
- Breweries
- Soft Drink and Fruit Juice manufacturing
- Commercial Kitchens
- Dairy Product Processing

NOT RECOMMENDED:

- For exposure to strong organic acids, oxidizing acids or solvents.
- For application at low temperatures (below 10°C)

PHYSICAL PROPERTIES:

(Typical Values)	19V Bedding	19V Grouting
Density g/cm ³	1.4 - 1.5	1.05 - 1.1
Adhesion to concrete Mpa	Concrete failure	
Adhesion to ceramic, Mpa	2.8	2.8

COVERAGE:

Theoretical quantity (allow for wastage)

- 19V Bedding: 3kg per sq. metre at 2mm thickness.
19V Grouting: 1kg per sq. metre for 100mm hexagonal tiles, joints 18mm deep x 2mm wide.
0.3kgs per sq. metre for 198 x 198 x 18mm (square)
0.5kg per sq. metre for 198 x 98 x 18mm (rectangular)

APPLICATION TEMPERATURE:

For optimum results, maintain a temperature of 10°C to 35°C on air, substrate and components during mixing, application and curing.

At temperatures below 10°C, curing may be inhibited and final technical properties may be affected.

At temperatures above 35°C, consistency and setting rates may be affected. If necessary consult Metz.





INSTRUCTIONS FOR USE

1. Temperature of Working Area

For optimum results, maintain a temperature of 10-35°C on air, substrate and components during mixing, application and curing. At temperatures below 10°C, the application becomes more difficult and curing is retarded. At temperatures above 35°C, initial set will take place too rapidly. This difficulty can be overcome by mixing in a cooler area or by cooling the components.

2. Surface Preparation

All surfaces must be clean, dry and free from oil, grease, water and other contaminants which may inhibit bond.

19V Bedding

New Concrete: New concrete should have attained a compressive strength of 20 Mpa minimum and be at least 28 days old. Surface must be free from laitance, form oils and curing compounds. Concrete must be true to plane and have all falls incorporated. Any deviations in level cannot be adjusted by the bedding. Surface must be free from any holes or protuberances.

Old Concrete: Concrete must be sound. All structural cracks should be repaired and all falls re-established with approved repair material. Finished surface must be true to plane and free from any holes or protuberances.

19V Grouting

All tile surfaces to be grouted must be clean and dry.

3. Mixing

a) Mixing Equipment:

Mechanical mixing is recommended. A low speed mixer or a heavy duty drill with an appropriate mixing paddle are suitable. Small quantities can be mixed by hand, using a trowel.

b) Mixing Proportions:

	By Weight	By Volume
19V Bedding:		
Liquid	2	6 lts
Hardener	1	3.5 lts
Powder P6	6	1 x 20 kg bag
19V Grouting:		
Liquid	2.6	2
Hardener	1	1

Note: The liquid to hardener ratio must not be altered under any circumstances.

The powder proportion may be adjusted +/- 10% to suit conditions.

c) Mixing Procedure:

Thoroughly mix liquid and hardener together first, in correct proportions. Add powder gradually with constant stirring.

d) Pot Life at 20°C: Approximately 90 minutes. Note: Material should not be left in bulk after mixing as this will cause heat build-up and reduce pot life.

e) Clean Up: Mixing equipment, tools, etc. can be cleaned with water prior to the initial set of the cement.

4. Installation

19V Bedding:

Apply mixed 19V bedding to substrate using a notched trowel. Apply tiles to bedding and use vibration equipment to level tiles. Ensure tiles are fully bedded, and that no voids exist. Ensure that bedding cement does not rise up joint more than 50% of joint depth. Spread only sufficient 19V that can be covered within 45 minutes at 20°C.

19V Grouting:

Application may vary for different tile surfaces and joint widths. For typical 2mm joints it is possible to prefill joints with sand to avoid air bubbles occurring. Broom clean, dry 30/60 sand across joints and remove excess.

Apply mixed 19V grouting to tile surfaces with rubber squeegee. Allow material to settle in joint. Check joints after first application and apply more material if joints have sunk. Apply clean, dry fine sand to surface. Remove excess grout from tile surface with rotary scrubber or clean, absorbent material dampened with minimum amount of clean water before grout begins to set (usually within 45 minutes at 20°C).

Note: Use of excess water when cleaning off will result in decreased hardness and chemical resistance of the joint surface. Surface may also discolour.

5. Setting/Curing

Setting time: Overnight at 20°C.

Full cure: 7 days at 20°C.

Do not allow water or traffic on joint surface for a minimum of 24 hours at 20°C.

6. Storage

Store in original, sealed containers in a cool, dry place under these conditions, minimum shelf life is 12 months.

7. Safety Precautions

a) Liquid and Hardener: Avoid contact with skin and eyes. Avoid breathing vapour. Use barrier cream and wear protective gloves. If contamination occurs, wash affected areas with soap and water (never use solvents for this purpose).

b) Powder: Avoid breathing dust. Allow adequate ventilation. Avoid contact with skin and eyes. Avoid breathing vapour.

For fully safety precautions refer to the Material Safety Data Sheet for each component.

Always ensure you have the latest data sheet version, refer www.metz.net.au

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**METZ SPECIALTY
MATERIALS PTY LTD**

A.C.N. 140 636 639

15A Stanton Road, Seven Hills, NSW 2147
Facsimile: (02) 9671 4292 Phone: (02) 9671 1311

6 University Place, Clayton North, VIC 3168
Facsimile: (03) 9561 6944 Phone: (03) 9561 6144

Unit 16, 42 Smith Street, Capalaba QLD 4157
Facsimile: (07) 3823 5552 Phone: (07) 3823 5555

Distributor