

SINMAST #4

EPOXY RESIN & MORTAR MIX SYSTEMS

Data Sheet 026

1. PRODUCT NAME

SINMAST #4

2. MANUFACTURER

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3. PRODUCT DESCRIPTION

SINMAST #4, #303 AND #444 is a high performance industrial epoxy grout system designed to provide durability and high-strengths in easy to use kit packaging. **SINMAST #4, #303 AND #444** will provide the ultimate solution for heavy-duty industrial grouting applications. **SINMAST #4** is the epoxy resin that is packaged in the **#303 & #444** pre-measured grout kits and can be used neat as a primer, coating or for crack and joint repair. **SINMAST #4, #303 AND #444** are also available in Regular, Fast-Set, and High-Impact resin formulations for specific project requirements.

Advantages

- High-Strength
- Stronger than cementitious grouts
- Easy mixing pre-measured kits
- No Shrinkage
- Bonds well to most dry surfaces

Uses

As a high-strength grout and patching or repair of worn or deteriorated surfaces. **SINMAST #4, #303 AND #444** are ideal for use in:

- Machine Bases
- Patching and Resurfacing
- Anchoring & Chocking
- Joint Nosings
- Precision Grouting
- Rail and Sole Plates

4. APPLICATION INSTRUCTIONS

- 1) Concrete surfaces should be clean and dry and metal surfaces should be sand blasted to "white metal" finish for enhanced adhesion.
- 2) Mix the Part A Resin and Part B Hardener according to packed ratio for 2-3 minutes until streak free.
- 3) Use neat resin as a primer at 125 s.f. per gallon on existing surfaces for enhanced adhesion.
- 4) Add in pre-packaged aggregate or 5.5 parts of approved aggregate/sand mix to one part of mixed epoxy resin until thoroughly coated. Immediately

place and finish grout with screed boards or trowels. Blend in more sand/aggregate for thicker mixes and use less sand/aggregate for more flowable mixes

- 5) Clean tools or uncured resin mix with water or mild solvents.

Consult Polygem for additional technical instructions for grouting specifications.

Packaging

SINMAST #4 is available in one and five gallon kits, **#303** is available in .5 cu. ft. kits and **#444** is available in 2.85 cu. ft. bulk kits.

Shelf Life

Factory sealed containers of this product are guaranteed to be of first quality for min. 6 months.

Limitations

- Do not install when surface temperature is below 35°F (7°C) or above 90°F (32°C).

Cautions

- Wear chemical goggles and NIOSH approved respirator. Wear proper protective clothing and gloves to prevent direct contact with resins. Consult Material Safety Data Sheet for full listing protective requirements.
- Protect finished work from traffic until fully cured.
- SINMAST #4, #303 and #444** may irritate eyes and skin. Avoid contact with eyes or prolonged contact with skin.
- For professional use only.
- Keep out of reach of children.

5. TECHNICAL DATA

Performance Properties

Test/Test Method Results

| #4 Resin Test Results | Regular | Fast-Set |
|------------------------------|-------------|-------------|
| Pot Life @ 77°F (100 gms) | 40 mins. | 20 mins. |
| Tack-Free Time @77°F | 10 hours | 2.8 hours |
| Compressive ASTM D-695 | 13,600 psi | 17,600 psi |
| Compressive Modulus | 318,000 psi | 516,000 psi |
| Tensile Strength ASTM D-638 | 7,800 psi | 10,700 psi |
| Elongation ASTM D-638 | 7.9% | 2.6% |
| Flexural Strength ASTM D-638 | 7,800 psi | 10,700 psi |
| Flexural Modulus | 396,000 psi | 581,000 psi |
| Mix ratio by volume A/B | 3:1 | 4:1 |
| Mixed Viscosity | 1,560 cps | 1,140 cps |
| Tg, °F | 131 | 133 |

| #303 & #444 Grout Test Results | Regular | Fast-Set |
|--------------------------------|------------|------------|
| Pot Life @ 72°F (100 gms) | 70 mins. | 50 mins. |
| Tack-Free Time @77°F | 10 hours | 2.8 hours |
| Compressive ASTM D-579 | 12,800 psi | 18,000 psi |
| Tensile Strength ASTM C-307 | 1,900 psi | 2,400 psi |
| Flexural Strength ASTM c-293 | 2,400 psi | 4,600 psi |

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