

# SINMAST #4, #303 and #444

## EPOXY RESIN & MORTAR MIX SYSTEMS

Data Sheet 026

### 1. PRODUCT NAME

**SINMAST #4, #303 AND #444**

### 2. MANUFACTURER

Polygem, Inc.  
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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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