

# #782 ACID SHIELD

## ACID RESISTANT EPOXY FOR NEAT COATINGS, BROADCAST OR EPC'S

### 1. PRODUCT NAME

#782 ACID SHIELD

### 2. MANUFACTURER

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### 3. PRODUCT DESCRIPTION

Polygem's #782 Acid Shield is a two-component, pigmented, modified Novolac epoxy. It is a 100% solids, moisture insensitive, non-shrink, nearly no odor during application. Excellent acid resistance in trenches and secondary containments.

### Uses

In decorative, commercial, institutional, industrial and civil engineering applications where acid environments exist or have potential spillages. This product handles most heavy-duty industrial and manufacturing floor conditions.

### Advantages

- NO VOC's – 100% Solids formula
- Complies with USDA, FDA, OSHA, ADA
- Moisture-insensitive formula
- Excellent Impact and Abrasion Properties
- Excellent work Time
- Excellent Strength Properties
- Curable down to 40°F

### Packaging

3 and 5 gallon units

### Shelf Life

Factory sealed containers of this product are guaranteed to be of first quality for 12 months.- Keep from Freezing

### Cautions

☐ Wear chemical goggles and NIOSH approved respirator. Wear proper protective clothing and gloves to prevent direct contact of resins. Consult Safety Data Sheet for full listing protective requirements.

☐ #782 ACID SHIELD may irritate eyes and skin. Avoid contact with eyes or prolonged contact with skin.

☐ For professional use only.

☐ Keep out of reach of children.

### 4. TECHNICAL DATA

Performance Properties @ 73F., 50% R.H.

Test/Test Method Results

Viscosity, cps	1500-1800cps
Color	Standard Colors
Pot Life, minutes	18 minutes
Consistency	Nearly Self Leveling

Tack-Free Time, hours

40°F	12-14
73°F	6-8
90°F	4-6

Tensile Properties (ASTM D638)

Tensile Strength 7,800psi

Elongation at Break 5-8%

Flexural Properties (ASTM D790)

Flexural Strength 13,300psi

Tangent Modulus of Elasticity 500,000psi

Slant Shear Strength (ASTM C882) 7 days

Temp	Value	Mode of Failure
50°F	4,000psi	100% Concrete Failure
90°F	4,200psi	100% Concrete Failure

Compressive Strength (ASTM D695)

Temp/	7 days
40°F	13,100psi
73°F	13,700psi
90°F	13,900psi

Compressive Strength (ASTM C579)

EPC 10,800psi

Hardness (Indentation-ASTM D 2240)

Neat epoxy, 7 day cure, Durometer, Shore D 80

Indentation (Load-MIL-D-3134, Para.4.7.4.2.1)

EPC, 7 day cure, Method: 1 in. diameter steel ram steadily applies a load of 2,000 lbs. for 30 min. on the test specimen that is placed on the concrete. Value-0.002in. indentation

Indentation (Impact- MIL-D-3134, Para.4.7.3)

EPC, 7 day cure, Method: 2 lbs steel ball is dropped twice from an 8ft height. Value -0.010 in. indentation

Adhesion to Concrete (Tensile Pull- ACI 503R)

EPC, 7 day cure, 400psi, 100% concrete failure

Abrasion Resistance (Taber-ASTM D 4060)

EPC, 7 day cure, 1,000 cycles, 1,000g. load, Wheel No.17, Loss 0.049g

Water Absorption (ASTM D 570)

EPC, 7 day cure, max. 0.11%

Coefficient of Thermal Expansion (ASTM D696)

Temperature range -30°C (-22°F) / 30°C (86°F)  
7 days 18.0 x 10<sup>-6</sup> in./in./°F

Resistance to Elevated Temperature (MIL-D-3134J0)

EPC, 7 day cure, No slip or flow at required temperature of 158°F and spillage at 180°F

Deflection Temperature (ASTM D 648)

Neat epoxy, 7 day cure, Fiber Stress Loading= 264psi,

195°F

Flammability (ASTM D635)

EPC, 7 day cure, self-extinguishing

Microbial Resistance (ASTM G21) Passes

Polygem, Inc. warrants its products to be free of manufacturing defects and that, at the time and place of shipment, our material will meet current physical properties when applied within Polygem's directions and tested in accordance with ASTM and Polygem standards. Polygem, Inc's liability is limited to replacement of material found defective. As Polygem, Inc. has no control over the use to which others may put its products, it is recommended that the product be tested to determine if suitable for a specific application and/or our information is valid in a particular circumstance. Responsibility remains with the architect or engineer, contractor and owner for the design, application and proper installation of each product. Nothing contained herein shall be construed to be a recommendation to use or as a license to operate under or to infringe any existing patents.

#782 ACID SHIELD 05/2017

Data sheets are subject to change without notice