

ACRYL-SET® LIQUID POLYMER

Liquid, acrylic-polymer bonding additive

DESCRIPTION:

ACRYL-SET® LIQUID POLYMER bonding additive replaces all or part of the mixing water in portland cement-based mixes to give the mixes better strength and improved adhesive bond. It can be used on both clean, sound concrete and clean, sealed wooden surfaces.

RECOMMENDED FOR:

- Repairing cracked, chipped or broken concrete
- Featheredge repairs
- Tuckpointing mortar
- Setting and grouting tile
- Toppings and rubbing walls
- Filling honeycombs in new concrete
- Highway and bridge paving
- Spraycoat applications
- Leveling concrete
- Bond slurries
- Underlayments

FEATURES/BENEFITS:

- Improves compressive, tensile and flexural strengths
- Improves bond strength — Allows permanent, thin repairs
- Improves cement coatings and rubbing compounds
- Self curing — For interior or exterior use
- Can be used in continuously wet areas, above or below grade
- Acceptable as an additive to cement-base mixes under the Federal meat and poultry products inspection program

PACKAGING:

ACRYL-SET LIQUID POLYMER is available in 1 U.S. gal (3.8 L) bottles and 5 and 55 U.S. gal (19 and 208 L) pails. The 1 gal (3.8 L) bottles are packaged 4 bottles to a carton.

Sand/Cement Formulations with ACRYL-SET LIQUID POLYMER/Water Ratios							
Application	Sand		Cement		Acryl-Set	Water	Approximate Coverage/Yeild
	Weight lb (kg)	Volume ft ³ (m ³)	Weight lb (kg)	Volume ft ³ (m ³)	Gallon (L)	Gallon (L)	ft ² @ in. (m ² @ mm) in thickness
Toppings or Large Overlays, Thin Bed Terrazzo	45 (20.4)	0.45 (0.0127)	15 (6.8)	0.160 (0.0045)	2/3 (2.53)	1/3 (1.26)	15 @ 1/2 (1.4 @ 12.7)
Concrete & Masonry Repairs, Setting & Grouting Tile & Stone, Setting Beds	45 (20.4)	0.45 (0.0127)	15 (6.8)	0.160 (0.0045)	1 (3.79)	—	30 @ 1/4 (2.78 @ 6.4)
Leveling Concrete	27 (12.3)	0.27 (0.0076)	13 (5.9)	0.138 (0.0039)	1 (3.79)	—	40 @ 1/8 (3.7 @ 3.2)
Plaster, Stucco, & Tuckpointing	27 (12.3)	0.27 (0.0076)	13 (5.9)	0.138 (0.0039)	1/4 (0.95)	3/4 (2.84)	20 @ 1/4 (1.85 @ 6.4)
Bond Scrub Coat	15 (6.8)	0.15 (0.0042)	15 (6.8)	0.160 (0.0045)	1 (3.79)	—	65 @ 1/16 (6.0 @ 1.6)
Rubbing Mix	15 (6.8)	0.15 (0.0042)	15 (6.8)	0.160 (0.0045)	1/4 (0.95)	3/4 (2.84)	30 @ 1/8 (2.78 @ 3.2)

NOTE (For Sand/Cement Formulations): The above are starting formulations. Use leaner mixes for coarser sands, deeper fills and non-traffic applications.

NOTE (For ACRYL-SET LIQUID POLYMER/Water Ratios): The above ratios are for normal conditions. When bonding or drying conditions are more critical, increase the amount of ACRYL-SET LIQUID POLYMER additive used. When in doubt, apply a test patch. Increasing the water will reduce strength and adhesive bond.

The following information regarding mixing and application is provided as a brief overview. For detailed instructions before use of this product, reference the ACRYL-SET LIQUID POLYMER product packaging.

MIXING:

Use a packaged dry mix or thoroughly mix dry, clean sand and cement. High-early portland cement (Type III) is preferred, but regular portland cement (Type I) is satisfactory. Do not use expansive or air-entrained portland cement. Before mixing ACRYL-SET LIQUID POLYMER with the dry mix, dilute as outlined in the previous chart which also shows formulation data for the dry mixes.

APPLICATION AS A BOND SLURRY:

ACRYL-SET LIQUID POLYMER additive can be applied as a fluid bond slurry mixture by trowel or by brushing or spraying. When applied as a bond slurry, do not use a bonding adhesive. The product sets slightly faster than normal when applied by brush or spray; therefore, be certain application techniques adhere to good trade practices.

CURING:

When surface drying is rapid because of high temperatures, wind or low humidity, wet cure for 24 to 48 hours. Keep the area damp to improve compressive strength and to minimize cracking. Do not use solvent-based, liquid membrane concrete curing compounds.

LIMITATIONS:

- **DO NOT -**
 - allow ACRYL-SET LIQUID POLYMER additive to freeze. This product must be shipped and stored above 32 °F (0 °C).
 - use ACRYL-SET LIQUID POLYMER additive in shrinkage- compensating or air-entrained concrete.
 - use ACRYL-SET LIQUID POLYMER additive when the temperature is below 40 °F (4 °C) or if it is expected to fall below 40 °F (4 °C) within 48 hours.
 - use pure ACRYL-SET additive as a bonding adhesive on exterior applications. An ACRYL-SET LIQUID POLYMER bond slurry mixture should be used.
 - mix a mortar or concrete with ACRYL-SET LIQUID POLYMER for longer than three minutes. Excessive air- entrainment will lower strengths.
 - use high shear mixing such as a Jiffiler at high speeds.
- In areas subjected to gasoline, solvents, brake fluid or chemicals which can attack portland cement, a test area is recommended.

RELATED BULLETINS:

ACRYL-SET LIQUID POLYMER Material Safety Data Sheet

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