ACRYL 60®

One-component, water-based acrylic bonding and modifying admixture

Advantages
- Significantly improves adhesion, cohesion, tensile, compressive, and flexural strengths of cement-based materials
- Will not re-emulsify when exposed to water
- Excellent chemical and UV resistance
- Improves freeze/thaw stability of Portland cement-based materials

Where to Use Acryl 60®
- Concrete floors
- In the gauging liquid of Thoro® waterproofing and repair products
- Walkways
- Ramps and structural beams
- Columns
- Interior or exterior
- Above or below grade

How to Apply Acryl 60®

Surface Preparation
The types of methods required for preparation will vary depending on the end product to be applied and also the site and substrate conditions. In all cases the surface must be clean and sound. Remove all loose and disintegrated material. Remove any and all traces of oil, grease, dirt, dust, efflorescence, biological, mold or mildew, release and curing agents. Vacuum, sweep, or blow out the areas to be patched with clean, oil-free air.

Concrete/CMU/Masonry Surfaces
Predampen the prepared and cleaned area to be patched or coated with potable water to a saturated surface dry (SSD) condition. Do not leave standing water on surface.

Proper surface preparation and cleanliness are extremely important.

Other Surfaces
For other surface preparation guidelines refer to the specific Thoro® product technical bulletin for information.

Mixing Instructions
The normal ratio of Acryl 60® to clean potable water is 1 part Acryl 60® to 3 parts of water (1:3). Where increased physical and chemical resistance are required, increase the Acryl 60® content in the mixing liquid to a 1:2 or 1:1 Acryl 60® to water ratio.

Always mechanically mix. Do not overmix or mix at a high speed.

Application
Sand/Cement Mortar
Thoroughly mix all cement and sand first. The sand must be clean, free of clay, and dry. Make up mixing liquid from a 1:3 or 1:2 Acryl 60® water ratio depending upon requirements. Slowly add the mixing liquid to the cement sand mixture, and mix with a slow-speed mixer for a short time (1 - 2 minutes) to avoid entrapment of air. After preparing, cleaning, and predampening the surface, brush apply a scrub coat (not diluted) of the Acryl 60® modified cement sand. Mix vigorously into the surface to displace any air pockets. Place the mix into the scrub coated repair area while the scrub coat is still wet or tacky. Maximum time for placement should not exceed 20 minutes. Higher air and surface temperatures will decrease working/placement time. Place the mix and avoid overtroweling. The trowel should be cleaned frequently, kept wet, and used with minimal pressure.

When rapid drying is expected due to high temperatures, rapid air movement or wind, it is recommended that the surface be covered with wet burlap to retain moisture. For normal use, allow a 24-hour curing period. For heavy wheeled traffic, allow a 4-day curing period.

<table>
<thead>
<tr>
<th>Application</th>
<th>Mixing Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>For scrub coats applied before patching or overlays</td>
<td>Use straight Acryl 60®</td>
</tr>
<tr>
<td>To improve the adhesion properties of pointing mortars and to reduce cracking in cement plaster</td>
<td>Use 1 part Acryl 60® to 3 parts water</td>
</tr>
<tr>
<td>For large overlays or topping</td>
<td>Use 2 parts Acryl 60® to 1 part water</td>
</tr>
<tr>
<td>For bonding cement plaster no thicker than 1/4&quot; - 3/8&quot; (6 mm - 10 mm)</td>
<td>Use 1 part Acryl 60® to 3 parts water</td>
</tr>
</tbody>
</table>

Note: The above ratios are for normal conditions. Where bonding is more critical, increase the Acryl 60® content of the mixing liquid. A TEST PATCH IS ALWAYS RECOMMENDED.
For detailed application instructions for Thoro® products, see specific data guide.

**Clean Up**
Clean all tools and equipment immediately with water. Cured material may be removed by mechanical means only.

**For Best Performance**
- Do not use Acryl 60® modified mixes when the ambient air or surface temperature is below 40°F (4°C), or when the temperature is expected to fall below 40°F (4°C) within 24 hours. High relative humidity, excessive moisture, and low temperatures will retard the curing of Acryl 60® modified mixes.
- Do not use with air entrained cement mixes or with air entraining admixtures.
- Do not expose cement-based mixes modified with Acryl 60® to water immersion service for a minimum of 24 hours at 73°F (23°C).
- Use with proper ventilation.
- Do not use Acryl 60® as a surface applied external bonding agent or as a primer.
- Do not overmix or aerate mixes.
- Not recommended for exposure to soft water conditions or immersion service where contact with water treatment chemicals is present without a protective top coat.
- Make certain the most current version of this data guide is being used; call Customer Service (1-800-433-9517) to verify the most current version.
- Proper application is the responsibility of the user. Field visits by ChemRex® personnel are for the purpose of making technical recommendations only and are not for supervising or providing quality control on the jobsite.

**Technical Data**

<table>
<thead>
<tr>
<th>Physical or Performance Property</th>
<th>Test Method</th>
<th>Result (Average)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Density</td>
<td>Lab value</td>
<td>8.65 lbs./gal. (1.04 kg/L)</td>
</tr>
<tr>
<td>Solid content</td>
<td>Lab value</td>
<td>28% by volume</td>
</tr>
<tr>
<td>Maximum water dilution</td>
<td>Lab value</td>
<td>1 to 3 parts H₂O</td>
</tr>
</tbody>
</table>

The following properties are for sand/cement mortar samples:

<table>
<thead>
<tr>
<th>Property</th>
<th>Test Method</th>
<th>With water</th>
<th>With 1:1 Acryl 60® and water</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compressive strength</td>
<td>ASTM C 109</td>
<td>28 day = 3800 psi (26.2 MPa)</td>
<td>28 day = 4500 psi (31 MPa)</td>
</tr>
<tr>
<td>Tensile strength</td>
<td>ASTM C 190</td>
<td>28 day = 225 psi (1.5 MPa)</td>
<td>28 day = 350 psi (2.4 MPa)</td>
</tr>
<tr>
<td>Flexural strength</td>
<td>ASTM C 548</td>
<td>28 day = 1000 psi (6.9 MPa)</td>
<td>28 day = 1800 psi (12.4 MPa)</td>
</tr>
<tr>
<td>Freeze/thaw</td>
<td>ASTM C 666</td>
<td>Durability = 11 @ 98 cycles</td>
<td>Durability = 102 @ 300 cycles</td>
</tr>
</tbody>
</table>

Test results are averages obtained under laboratory conditions. Reasonable variations can be expected.
Order Information

Packaging
Acryl 60®
- 1 qt. (0.9 L) bottles
- 1 gal. (3.8 L) bottles
- 5 gal. (18.9 L) pails
- 30 gal. (113.5 L) drums
- 55 gal. (208 L) drums

Shelf Life
One year in unopened, undamaged container when stored between 40°F to 100°F (4°C to 38°C).

Caution

Acryl 60® contains no hazardous ingredients

Risks
May cause skin, eye or respiratory irritation. Ingestion may cause irritation.

Precautions
KEEP OUT OF THE REACH OF CHILDREN. Avoid contact with skin, eyes and clothing. Wash thoroughly after handling. Keep container closed when not in use. DO NOT take internally. Use only with adequate ventilation. Use impervious gloves, eye protection and if the TLV is exceeded or used in a poorly ventilated area, use NIOSH/MSHA approved respiratory protection in accordance with applicable federal, state and local regulations.

First Aid
In case of eye contact, flush thoroughly with water for at least 15 minutes. In case of skin contact, wash affected areas with soap and water. If irritation persists, SEEK MEDICAL ATTENTION. Remove and wash contaminated clothing. If irritation causes physical discomfort, remove to fresh air. If discomfort persists or any breathing difficulty occurs or if swallowed, SEEK IMMEDIATE MEDICAL ATTENTION.

For more information see Material Safety Data Sheet (MSDS) for this product.

Proposition 65
This product does not knowingly contain material listed by the state of California as known to cause cancer, birth defects or other reproductive harm.

VOC Content
1 g/L or 0.00 lbs/gal less water and exempt solvents.

For medical emergencies only, call ChemTrec (1/800/424-9300).
Limited Warranty Notice

Every reasonable effort is made to apply ChemRex® exacting standards both in the manufacture of our products and in the information which we issue concerning these products and their use. We warrant our products to be of good quality and will replace or, at our election, refund the purchase price of any products proved defective. Satisfactory results depend not only upon quality products, but also upon many factors beyond our control. Therefore, except for such replacement or refund, CHEMREX® MAKES NO WARRANTY OR GUARANTEE, EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF FITNESS FOR A PARTICULAR PURPOSE OR MERCHANTABILITY, RESPECTING ITS PRODUCTS, and CHEMREX® shall have no other liability with respect thereto. Any claim regarding product defect must be received in writing within one (1) year from the date of shipment. No claim will be considered without such written notice or after the specified time interval. User shall determine the suitability of the products for the intended use and assume all risks and liability in connection therewith. Any authorized change in the printed recommendations concerning the use of our products must bear the signature of the ChemRex® Technical Manager.

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