

HAIRLINE CRACK SEALER

PRODUCT #207

Penetrating Concrete Crack Adhesive

PRODUCT NAME and DESCRIPTION

Product #207 is a two-component, 100% reactive, very low viscosity, medium modulus epoxy resin system designed to penetrate and bond cracks in concrete structures by gravity feed.

PRODUCT USE

The low viscosity epoxy resin will penetrate into fissures as narrow as 0.002 of an inch in width. Its high affinity for superior chemical and mechanical bond to concrete eliminates the need for injection equipment on open, clean cracks on many projects.

Thermal-Chem **Hairline Crack Sealer** has many potential applications for filling cracks in concrete structural slabs, parking decks, bridge decks, highway pavements, airport runways and industrial and commercial floors.

ADVANTAGES

- Unique, non-shrinking system penetrates into the smallest fissures, structurally bonding the concrete into a monolithic unit.
- Stops moisture and chemical penetration of both liquid and vapor through the crack providing a total waterproof seal, thus protecting the concrete reinforcement steel from further corrosion.
- Material is easily applied on dry or moist surfaces by conventional tools such as squeegees and rollers.
- Excellent potlife allows sufficient time for application.
- Balanced properties of the cured system protect the concrete without causing any stresses to the structure.

TYPICAL PHYSICAL PROPERTIES

ASTM C881 Compliance

Type 1, 2 and 4	1
Grade 1	1
Classes: 20 to 120° (-6 to 49°C)	A+B+C
ACI 503.4-79	Complies
Density, lbs./gal., ASTM D1475	9.1 ± .2
Viscosity, cps., ASTM D2393	20-40 cps
Flash Point, °F, ASTM D3278	180

TYPICAL CURED PROPERTIES

COMPRESSIVE STRENGTH ASTM C39, AASHTO T22	4,800 psi
COMPRESSIVE STRENGTH ASTM D695	10,100 psi
TENSILE STRENGTH ASTM D638	7,900 psi
ELONGATION ASTM D638	8-9%
FLEXURAL STRENGTH ASTM D790	9,200 psi
FLEXURAL MODULUS OF ELASTICITY ASTM D790	830,000 psi
SHORE D HARDNESS, MIN., ASTM D2240	70

LIMITATIONS

- Do not thin epoxy with solvents.
- Do not apply on ice or frost covered surfaces.
- Do not apply on wet surfaces.
- Prolonged storage above 100°F (38°C) may shorten shelf and potlife.
- If substrate temperatures are below 70°F (20°C) preheat each component to 90°F (32°C) before mixing. See Section entitled Curing.

STORAGE AND SHELF LIFE

Store **Thermal-Chem Hairline Crack Sealer** elevated from the floor on pallets, in an environment that maintains a constant temperature above 36°F (2°C). Do not allow Thermal-Chem products to freeze. Shelf life of unopened containers at 77°F (25°C) is approximately 1 year.

COVERAGE

The rate of coverage is dependent upon the size of

crack width, crack depth, number of cracks and the concrete porosity. Typical application is 50-200 square feet per gallon.

SURFACE PREPARATION

The concrete surface and cracks must be free of oils, grease, waxes, curing compounds, dust and other debris that could inhibit the epoxy from wetting the substrate. Contaminates can be removed with any dry abrasive method such as sand or steel shot. Vacuum cracks as necessary to remove debris. Freestanding water can be blown off with oil free compressed air.

MIXING

To assure product consistency, pour the "B" component into the "A" component and mix thoroughly using a mechanical paddle type mixer. When pre-measured kits are used no weighing is necessary. When larger volume containers are used, refer to the product label for proper mixing ratios.

APPLICATION

Thermal-Chem Hairline Crack Sealer can be applied to the substrate by using a squeegee and/or in combination with a roller. The material should be worked into the open crack for 5 to 10 minutes to insure penetration. If an excess of resin is present upon the surface, broadcasting sand into the wet epoxy will provide an anti-skid surface if desired.

CURING

The product may be used on substrate temperatures between 40° to 120°F. The warmer the temperature, the faster the cure, the lower the temperature, the slower the cure.

Re-coating should be performed after tack-free stage develops and within 24 hours of the first coat. In high humidity conditions, a greasy film may be seen on exposed upper surface of the epoxy due to amine blush. This film will wash off with a warm soap and water solution. In outdoor applications the sanding of the surface hides this film and it soon disappears from natural environments such as rain and snow.

CLEAN UP

All tools must be immersed or cleaned with mineral spirits, toluene, methyl ethyl ketone or xylene before curing occurs. Do not allow any epoxy to harden on tools, equipment or areas where adhesion is not desired. Read all safety labels and Material Safety Data Sheets before using solvents. Some solvents are flammable.

PRODUCT HANDLING

Read the Material Safety Data Sheet thoroughly before use.

Warning: For professional use only. Avoid contact of uncured material with skin and eyes. Contact with skin may result in irritation. Wash skin with soap and water. If contact with eyes should occur, flush with water for 15 minutes and seek immediate medical attention.

AVAILABILITY

Products are manufactured and available through the Thermal-Chem Corporation, 2120 Roberts Drive, Broadview, IL 60155.

Tel: 800/635-3773 ■ 847/288-9090

Fax: 847/288-9091

E-mail: sales@thermalchem.com

Website: www.thermalchem.com

TECHNICAL SERVICES

Additional Product Data, complete Technical Support and Product Specifications are all available through the Thermal-Chem Corporation or its local representatives.

Every reasonable precaution and effort has been taken in the manufacturer of all Thermal-Chem products to comply with the published product data. Actual product performance may vary slightly due to environmental influences and/or conditions.

LIMITED WARRANTY

Thermal-Chem Corporation warrants its product to be of good quality and will replace any product

proved defective. Satisfactory results depend not only upon quality products but also upon many factors beyond our control. Therefore, except for such replacement, **THERMAL-CHEM CORPORATION MAKES NO WARRANTY OR GUARANTEE, EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF FITNESS FOR A PARTICULAR PURPOSE OR MERCHANTABILITY, RESPECTING ITS PRODUCTS**, and Thermal-Chem Corporation shall have no other liability with respect thereto, including without limitation, liability for incidental or consequential damages. Any claim regarding product defect must be received in writing within one hundred and eighty (180) days from the date of shipment. No claim will be considered without such written notice or after the specified time interval. The user shall determine the suitability of the products for the intended use and assume all risks and liability in connection therewith.