THERMAL-CHEM FLEXGARD 125 Gel
PRODUCT 102

EPOXY CONTROL JOINT SYSTEM

PRODUCT NAME *and* DESCRIPTION

Thermal-Chem **FlexGard** products are flexibilized two-component, 100% solids epoxy systems used to fill control (contraction) joints, isolation, and cold joints in portland cement concrete.

Thermal-Chem **FlexGard 125 Gel, Product 102**, is a medium viscosity, load-bearing, non-shrink flexibilized epoxy joint filler with balanced elongation properties and surface hardness to prevent concrete spalling. Its physical properties provide adhesion to concrete, asphalt and metal while still maintaining excellent flexibility and elongation.

PRODUCT USE

Product 102 is used to seal and waterproof saw cuts, control

(contraction) joints, the voids between concrete slabs and walls and were formulated to perform where load-bearing qualities are required in non-moving joints.

When additional flexibility is required in joint material, refer to Thermal-Chem FlexGard J Systems.

ADVANTAGES

- Thermal-Chem FlexGard Systems create an impervious joint filler protecting the joint from attack by chemicals, salts, acids, alkali and petroleum-based products.
- These flexible resins stop both liquid and vapor transmission.
- Provides excellent mechanical adhesion to the inner wall substrate without causing stress
- The joint filler is designed to fail before the concrete if stress should ever occur.
- May be applied to moist or dry substrates down to 33°F (1°C).

LIMITATIONS

- Do not thin epoxy with solvents.
- Over time may lose some flexibility when exposed to cold temperatures

PHYSICAL PROPERTIES

ACI 504 Specification	Complies
Tensile Strength, ASTM D638, psi, avg. 200	
Elongation, ASTM D638 50% ± 10	
Bond Strength, psi, avg. 200	
Durometer Hardness ASTM D2240, Shore A	50 - 70
Shore D	18 - 30
Viscosity, Pourable or Pumpable (1)	Passes
Wt./gal., lbs./gal. ASTM D1963	9.0 ± .2
Specific Gravity, ASTM D1963	1.08
Potlife, 1 gallon, mins. (1)	27 ± 2
Tack-free after application, hrs. (1)	3.4 ± .2
Tack-free after application, hrs. (3)	20 - 24
Cure time after application, days (1)	5 - 7
Solid Content, ASTM D1259	100%
Temperature resistance, dry	250°F (121°C)
Shelf life, yr. (1)	1

Notes:

(1)72°F (21°C)
(2)Complies except tensile elongation
(3) 33°F (1°C)

PRODUCT APPLICATION

Thermal-Chem FlexGard 125 Gel should be placed to a minimum of 25% of the depth of the substrate. The maximum width when subjected to heavy traffic loads should not exceed 1.0 inch (25 mm).

Note: Thermal-Chem FlexGard 125 Gel may be placed to any depth without complications or curing problems. There are no known size or shape limitations when used in pre-cast joints. Consult your Thermal-Chem representative for assistance.

COLOR AND TEXTURE

- Available in 10 colors

The mixed components create a semi-elastomeric dense, cross-linked, reactive smooth surface filler compound.

SURFACE PREPARATION

The sawed or formed joint shall be clean and sound. Remove all curing compounds, dust, waxes, grease and foreign particles. Methods of cleaning substrate surfaces may include sandblasting or high pressure water blasting. For best results, severely spalled joints should be patched with one of Thermal-Chem's mortar systems before applying FlexGard products.

MIXING PROCEDURES

For best results, maintain unmixed epoxy temperatures at 77°F (25°C). Test temperatures of each component and record before mixing. Do not guess as to what the temperature might be.

Open container and premix component "A" until one even color develops with no settled pigment remaining on the bottom of the container. One and five gallon units are pre-measured. Add component "B" to "A" and blend until one homogeneous mass develops. Product is then ready for immediate use.

For proportional batches of any size, each product label states the mixing ratio of that given batch in parts by weight. Always pre-blend each pigmented component before removing any quantity of material from the container. Add component "A" first and then component "B" and mix as stated above.

For cold substrate applications below 70°F (21°C), preheat individual components to 90°F (32°C) before mixing as stated above. The potlife of the epoxy will be shortened if kept in the container as a large mass. Therefore, mix only the quantity that can be applied within the reduced time. Placing the epoxy into the colder substrate joint will extend the gel and tack-free stage.

APPLICATION

102 FlexGard 125, a gel consistency, must be power caulked or manually pressed into the void and struck off.

CURING

Once the Thermal-Chem **FlexGard** Resin has been placed, it must be allowed to develop into the gel stage completely through the total thickness and become tack-free. This period of time is dependent upon the temperature of the concrete and the air. The colder the temperature, the longer it will take to become tack-free and totally cured. Control joints may be used upon developing into the tack-free stage.

CLEAN UP

All tools must be immersed or cleaned with mineral spirits, toluene, MEK or xylene before curing occurs. Note: Most solvents are flammable. Read the Material Safety Data Sheet(s) before using.

PRODUCT AVAILABILITY

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

Tel: 800/635-3773 ▪ 847/288-9090
Fax: 847/288-9091
E-Mail: sales@thermalchem.com
Web Site: www.thermalchem.com

TECHNICAL/SPECIFICATION SERVICES

Additional Product Data, complete Technical Support and Product Specifications are all

available through Thermal-Chem Corporation; or their 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.

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.

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 CORP. 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.