

Product Data Sheet

70704/70705 — Novolac Epoxy
45020: Base 45029 : Curing Agent 95047



Description: 70704/70705 (Hempel 45020) is a two-component novolac epoxy resin.

Recommended use: As a chemical-resistant coating and/or binder. Applications include: as a high-gloss, chemical-resistant protective coating used in thin film systems; clear and pigmented binder for seamless, slip-resistant broadcast systems; and heavy-duty chemical- and abrasion-resistant, trowel-applied mortar flooring systems.

Features: Excellent tolerance of a variety of concentrated mineral and organic acids, including: sulfuric, hydrochloric, acetic, and various fatty acids. Full chemical resistance chart available at www.neogard.com.
Meets U.S.D.A. requirements for incidental food contact.
Meets South Coast Air Quality Management District (SCAQMD) VOC requirements.

Certificates/approvals: LEED: MRc5, IEQc4.2

Availability: Available in North America. Not included in Group Assortment; other regions must confirm.

Colors and packaging:

70704-02 (4502916650)	Gray	
70704-05 (4502957930)	Red	
70704-00 (4502900000)	Clear (special order only)	5-gallon kit
70705 (9504700000)	Clear	

Some standard colors and/or packaging may have extended lead times and/or minimum quantities. Contact Neogard for additional colors.

Physical constants:

Compressive strength	10,000 psi	ASTM D695
Tensile strength	8,500 psi	ASTM D638
Elongation at break	6%	ASTM D638
Flexural strength	11,800 psi	ASTM D790
Modulus of elasticity	134,000 psi	ASTM D790
Shore D	84	ASTM D2240
Adhesion	300 psi	ASTM D4541
Water resistance	0.15%	ASTM D570
MVT at 10 mils	0.15 Perm	ASTM E96
Flammability	Pass	ASTM D635
Taber abrasion	40 mg, 1,000 cycles, CS-17	ASTM D4060
Anti-microbial	Pass	JIS Z 2801-2010
Weight/gallon (mixed)	9.7 lbs/gal	ASTM D1475
Weight solids (mixed)	100%	ASTM D4209
Volume solids (mixed)	100%	Calculated
Viscosity (mixed)	700 cps	ASTM D2196
Flash point	>205°F	ASTM D3278
VOC (mixed)	<5 g/L	EPA Method 24
Shelf life	1 year	
Thin film cure at 75°F/23°C	8–9 hours	
Full cure for chemical resistance at 75°F/23°C	7 days	

The above tested results are typical values. Individual lots may vary up to 10% from the typical value. Further technical information can be found at www.neogard.com.

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Application details:

Version, mixed product	45020
Mixing ratio:	Base 45029 : Curing Agent 95047 3 : 2 by volume
Mixing instructions:	Pre-mix base for 3–5 minutes before adding curing agent. Mix for a minimum of 5 minutes before applying. Jiffy Mixer paddle recommended.
Application method:	Roller or squeegee
Thinner (max.vol.):	7055 Odorless Reducer (086JB) or Hempel's Thinner 08080 (xylene) (10%)
Pot life:	30 minutes at 70°F/21°C
Cleaning of tools:	7055 Odorless Reducer (086JB) or Hempel's Thinner 08080 (xylene)
Safety:	Handle with care. Use with adequate ventilation. Before and during use, observe all safety labels on packaging and paint containers, consult Neogard Safety Data Sheets and follow all local or national safety regulations.
Surface preparation:	According to Neogard Guide Specifications.
Application conditions:	Ambient temperature must be between 50°F/10°C and 85°F/29°C, and a minimum of 5°F/3°C above dew point.
Preceding coat:	According to Neogard Guide Specifications.
Subsequent coat:	Must be recoated within 24 hours at 70°F/21°C for subsequent coat to properly bond. If the 24-hour recoat window is missed, sand to dull finish before applying subsequent coat(s).
Storage temperature:	Store in a cool area to ensure full shelf life. Recommended temperature: 70°F/21°C.
Remarks:	Not resistant to concentrated oxidizing acids such as nitric or chromic. Exposures to chemicals or combinations of chemicals at temperatures above 80°F/26°C should be tested under conditions which simulate the in-use environment.

Note: **70704/70705 is for professional use only.**

Issued by: Hempel (USA) – 45020

This Product Data Sheet (“PDS”) relates to the supplied product (“Product”) and is subject to update from time-to-time. Accordingly, the buyer/applicator should refer to the PDS current as of the time of delivery. In addition to the PDS, the buyer/applicator may receive some or all of the specifications, statements and/or guidelines listed below or available at www.neogard.com (the “Additional Documents”):

No.	Document Description
1	PDS
2	Guide Specification
3	Application Manual
4	Other Technical Support Information (i.e. summary application tables, troubleshooting guides, maintenance manuals, chemical resistance charts and other technical information)

In the event of a conflict between this PDS and the Additional Documents, the conflict shall be resolved in accordance with the order of priority set forth above. In addition, the buyer/applicator should refer to the relevant Safety Data Sheet current as of the time of delivery and available at www.neogard.com. Buyer/applicator is responsible for determining the suitability of the intended use of the Product, and Neogard disclaims all responsibility for any use, handling and storage of the Product that is not in accordance with the requirements set forth in the relevant PDS and the Additional Documents. The terms and provisions hereof apply to this PDS, the Additional Documents and any other documents supplied by Neogard in respect of the Product. The Product is supplied and all technical assistance is given subject to the General Conditions of Sale of Hempel Products and/or Services available at www.hempel.com. NEOGARD MAKES NO OTHER WARRANTY THAT EXTENDS BEYOND THE WARRANTY REFERENCED THEREIN INCLUDING, WITHOUT LIMITATION, ANY IMPLIED WARRANTIES OR CONDITIONS OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. NEOGARD WILL NOT BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES FOR BREACH OF ANY EXPRESS OR IMPLIED WARRANTY OR CONDITION, OR THAT IN ANY WAY ARISE IN RELATION TO THE PRODUCT. 70704-70705-PDS ksk 10272021.docx

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