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# Product Data Sheet

## HM 45 Hand Mix Polyurea

USGBC LEED, EQ Credit 4:  
 Low – emitting VOC Compliant Materials

**Product Description – PolyVers HM 45** is a hand mixable, self-leveling, 100% solids, flexible, two-component Polyurea and ambient temperature cure spray material. Designed for coating applications, slab stabilization, and small patching where mixing by hand or pumping through non-heated plural component equipment is desirable.

**Uses - PolyVers HM 45** is a superior hand mixable material designed specifically for applications requiring elastomeric qualities. **HM 45** is flexible and accommodating to movement of the substrate. May be used for slab stabilization or as low-pressure spray coating with ambient cure on all bondable surfaces. **HM 45** is capable of application well below freezing and is ideal for use in cold storage facilities, freezers, and food processing plants where time and temperature are serious concerns.

### Ideal for Applications In -

- Slab Stabilization
- Industrial Facilities
- Roofing
- Manufacturing Facilities
- Water and Waste Water Treatment
- Food Processing Facilities

### Advantages -

- 100% Solids, No VOC's
- Flexible, 450-500% Elongation
- Remains Flexible in Cold Temperatures
- Return Project to Service in 3 Hours
- Cures From -40°F to 130°F
- Odorless, No Toxic Vapors
- Hand Mixable and Brushable

### Physical Properties -

<u>Cured Sealant Properties</u>	<u>Test Method</u>	<u>Typical Value</u>
VOC	ASTM D3960	Zero
Solids Content		100%
Shore Hardness	ASTM D2240	50 D
Elongation	ASTM D412	450 - 500%
Tensile Strength, psi	ASTM D412	3025
100% Modulus, psi	ASTM D412	1000
300% Modulus, psi	ASTM D412	1900
Tear Strength, pli, Die C	ASTM D624	478
Pot Life		3 – 4 Minutes
Tack Free		45 Minutes
Initial Cure		3 Hours
Final Cure		7 Days

**Limitations** - Allow concrete surfaces to fully cure prior to application of **HM 45**. **HM 45** is an aromatic based Polyurea. Discoloration from exposure to ultraviolet light may occur, however the physical properties are unaffected.

### **Packaging** -

- One Hundred Ten Gallon Kit: 55 gallons of 'A' side and 55 gallons of 'B' side - Drum containers filled by weight, volume is closely approximated.
- Ten Gallon Kit: 5 gallons of 'A' side and 5 gallons of 'B' side.
- Two Gallon Kit: 1 gallon of 'A' side and 1 gallon of 'B' side.

### **Mixing** -

Hand Mixing: Mix in small quantities, mix equal amounts of A and B components. Mix thoroughly, until a homogeneous mix is achieved. Apply material directly to surface to be coated using a trowel or brush.

Machine Dispensing: Use 1:1 ratio pump, with or without heater as required for individual application. Low-pressure spray head should be used for ambient cure spray applications.

**Colors** - Standard color is charcoal gray, light gray, or black.

**Shelf Life** - One year, in original unopened factory containers under normal storage conditions of 55°F to 95°F.

**Clean Up** - Cured product may be disposed of without restriction. Excess liquid 'A' and 'B' material should be mixed together and allowed to cure, then disposed of in the normal manner. Product containers that are "drip free" may be disposed of according to local, state and federal laws.

**Safety** - Read Material Safety Data Sheets before using. Available at [polyvers.com](http://polyvers.com)

Basic safety for personal protection is:

- Long-sleeve overalls or disposable Tyvex overalls
- Rubber gloves.
- Splash shield or safety glasses with splash guards
- Rubber or leather boots
- Do not use near high heat or open flame
- Do not take internally
- Keep out of the reach of children
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**Preparation and Installation** - Reference **HM 45** specifications for detailed preparation and installation procedures. Substrate priming is not required on all substrates.

### **Technical Services - Sales and Customer Support (913) 321-9000**

**Warranty** — *PolyVers International* will refund the price of or replace, at its election, product it finds to be defective provided the product has been used properly. Except as expressly stated above, the Company makes no warranty of merchantability and no warranty of fitness for any particular purpose, nor does it make any warranty, expressed or implied, of any nature whatsoever with respect to the product or its use. In no event shall the company be liable for delay caused by defects, for loss of use, for indirect, special or consequential damages, or for any charges or expenses of any nature incurred without its written consent.