



PE85MI

POLYUREA JOINT FILLER

The new formula of PE85MI is a moisture insensitive, self-leveling, 100% solids, two component Polyurea Elastomer joint and crack filler. Designed for concrete with low to medium thermal cycling, PE85MI cures rapidly and consistently in applications ranging from 30°F to 130°F. PE85MI is tack free in 4 minutes and areas can be reopened to vehicle or foot traffic within 1 hour after installation.

Applications

PE85MI is designed to fill interior random cracks, damaged control joints, or new control joints on horizontal concrete and is best suited for industrial floor applications where heavy vehicle traffic, such as forklifts or steel wheeled carts, is commonplace. PE85MI is semi-rigid, allowing small slab movement, yet strong enough to protect the vertical edges of control joints in concrete from spalling under extreme loading. Common installations for PE85MI include:

- Industrial Facilities
- Warehouse Floors
- Manufacturing Facilities
- Pulp and Paper Mills
- Bottling and Canning Facilities
- Airports
- Water and Waste Water Treatment
- Food Processing Facilities

Advantages

- Moisture Insensitive
- Semi-Rigid to protect joint edges
- 100% Solids, Contains No VOC's
- Can be Polished without Smearing
- Return Project to Service in 60 Minutes
- Cures From 30°F to 130°F
- Meets USDA & FDA Requirements
- Meets the [United States Green Building Council's LEED®](#) standards for IEQ Credit 4.1

Physical Properties

Color A+B	Varies, can be tinted
Viscosity (mixed)	Self Leveling
Mix Ratio (by volume)	1:1
Pot Life 100 grams at 74°F	30 seconds
Tack Free (thin film) @ 74°F	4 mins
Initial Cure	15 mins
Final Cure	60 mins
Elongation % (ASTM D-412)	150
Tensile Strength, psi (ASTM D-412)	1100
Shore "A" Hardness (ASTM D-2240)	85-87 A
Tear Strength, Die B (ASTM D-624)	148

Available in

- 22 oz. Cartridges
- 56 oz. Cartridges
- 2 Gallon Kits
- 10 Gallon Kits

Shelf Life

1 year in original unopened container.

Storage Conditions

Store material between 55°F and 85°F.

Consistency

Pourable, self-leveling liquid

Pot Life

Approx. 30 seconds
(100 gram mass)

Appearance

Semi clear, Custom Color
Matching Available



SAFETY DATA

Material Coverage per Gallon

Consider approximately 15% for waste due uneven joint depth and width, overflow of material, nozzle waste, etc.

		Joint Width						
		1/8"	3/16"	1/4"	3/8"	1/2"	3/4"	1"
Joint Depth	1/8"	1232	821	616	411	308	205	154
	1/4"	616	411	308	205	154	103	77
	1/2"	308	205	154	103	77	51	39
	3/4"	205	137	103	68	51	34	26
	1"	154	103	77	51	39	26	19
	1 1/2"	103	68	51	34	26	19	13
	2"	77	51	39	26	19	13	10
	2 1/2"	62	41	31	21	15	10	7
	3"	51	34	26	17	13	8	6
	4"	39	26	19	13	10	7	5

Cartridge Calculation

1 gallon = 128 oz. Multiply gallons by 128 oz.
divide by cartridge size. 22 oz. cartridge example:
10 gals. x 128 oz. = 1280 oz. ÷ 22 oz. = 58 cartridges

Chemical Resistance

Test Procedure; ASTM D-1308 @72°F

R=Recommend

RC=Recommend Conditional =some swelling or discoloration

N=Not Recommend

1=Some discoloration only

Chemical	Result
Acetic Acid 10 %	R
Acetone	RC
Battery Acid (Sulfuric Acid)	RC
Brake fluid	R
Chlorine (2,000 ppm in water)	R
Citric Acid	R
Gasoline	R
Hydraulic Oil	R-1
Methanol (5%) Gasoline	RC
Motor Oil	R-1
Toluene	RC
Vinegar	R
Water	R
Xylene	R

Application Recommendations

Surface must be clean and sound. Remove dust, grease, curing compounds, waxes, foreign particles, and disintegrated materials. Condition material to at least 70°F prior to installation. If needed, tint should be added to "B" side container only and mixed for at least 2 minutes. Only component "B" side needs to be stirred before being loaded into pump. For bulk installations, use a 1:1 ratio metered pump. Do not allow material to reside in static mixing head or nozzle for more than 30 seconds or nozzle blockage may result.

Limitations

- Do not thin. Solvents will prevent proper cure.
- Not for sealing cracks under hydrostatic pressure.
- Material is a vapor barrier after cure.
- Minimum age of concrete must be 28 days, depending on curing and drying conditions prior to applications.

Disposal & Clean Up

Cured product may be disposed of without restrictions. Excess liquid 'A' and 'B' material should be mixed together and allowed to cure, then disposed of in the normal manner. Cured materials may be stripped or peeled from plastic tools and containers. It is recommended that metal tools be cleaned within one hour of use by cutting or peeling cured material from tool.

Safety & Handling

SDS will be mailed immediately upon receipt of a purchase order or upon request. All personnel should read and understand product Safety Data Sheets provided. Long sleeved overall or disposable overalls, rubber gloves, splash shields, rubber or leather boots should be worn. Do not use near high heat or open flame. Do not take internally. Keep out of the reach of children.

Warranty

HI-TECH warrants its products to be free of manufacturing defects will meet HI-TECH's current published physical properties when applied in accordance with HI-TECH's directions and tested in accordance with ASTM and HI-TECH's standards. There are no other warranties by HI-TECH of any nature whatsoever, expressed or implied, including any warranty of merchantability or fitness for a particular purpose in connection with this product. HI-TECH Corporation shall not be liable for damages of any sort, including remote or consequential damages, resulting from any claimed breach of any warranty, whether expressed or implied, including any warranty of merchantability or fitness for a particular purpose or from any other cause whatsoever.

