



KEY 9540-H MMA COVE BASE PASTE

DESCRIPTION

KEY 9540-H MMA Cove Base Paste is a 100% reactive methyl methacrylate paste grade resin for use as a binder for troweled cove base mortars and trench linings. The cove base mortar system based on **KEY 9540-H MMA** hardens rapidly after the addition of **Key 9000 MMA** hardener powder.

KEY ADVANTAGES

- Fast Cure (60 min.)
- Contains Thixotropic Fillers for Vertical Applications
- Use Over Wide Temperature Range – Even Below Freezing
- VOC Compliant (100% Solids), Meets USGBC LEED Requirements

KEY CONSIDERATIONS

- Concrete must be dry, free of dirt, waxes, curing agents and other foreign materials.
- Do not store outside in direct sunlight, storage temperature must be < 80°F.
- On or below grade installation must have an efficient vapor barrier under the slab (minimum 10-15 mil).
- Moisture Vapor Transmission must be less than 3 lbs per ASTM-F-1869 and less than 80% RH per ASTM F-2170 unless Key Resin moisture mitigation system is used.

COMPOSITION

KEY 9540-H MMA is a 100% reactive methyl methacrylate resin.

COLOR SELECTION

KEY 9540-H MMA is supplied clear. Color packs are available for selected colors. Color pack mix ratio is 1 quart pigment per 5 gallons resin. See **Key Resin MMA Color Card**.

SURFACE PREPARATION

Surface preparation is the most critical portion of any successful resinous flooring system. All substrates must be properly prepared as outlined in **Key Resin Company's Technical Bulletin #1**. In addition, **All Key MMA Flooring Systems require a minimum surface profile of CSP 4-5**, as outlined in ICRI Guideline 310.2-1997, formerly named G-03732 (available from www.ICRI.org). Work must be performed by trained or experienced contractors or maintenance personnel.

PHYSICAL PROPERTIES

Appearance	Bluish tint
Viscosity	Paste consistency
Weight per Gallon	8.1 lbs.
Percent Reactive	100%, zero VOC
Pot Life (working time) 73°F	20-25 minutes, varies
Compressive Strength (filled mortar)	3,500-4,000 psi
Tensile Strength (filled mortar)	800-1,000 psi

FORMULATION GUIDE

KEY 9540-H MMA requires the addition of **KEY 9000 MMA HARDENER** to initiate the hardening process. The amount of hardener must be adjusted based on surface temperature (see table below). At temperatures below 40°F, **KEY 9101 MMA COLD TEMPERATURE ACCELERATOR** must be used in addition to the amount of hardener used at the 40°F or 30°F level.

KEY 9540-H MMA Resin
Mix Ratios, Pot Life and Hardening/Temperature

Temp. (°F) of Resin, Air & Floor Surface	Hardener by Volume (oz.) Per Gallon of 9540-H Resin	Pot Life (min.)	Hardening Time (min.)
+30°F	5 vol. oz.	Approx. 30	Approx. 60
+40°F	4-5 vol. oz.	Approx. 25	Approx. 55
+50°F	4 vol. oz.	Approx. 20	Approx. 45
+60°F	3-4 vol. oz.	Approx. 20	Approx. 45
+70°F	2-3 vol. oz.	Approx. 20	Approx. 45
+80°F - 90°F	2 vol. oz.	Approx. 15	Approx. 45

Note: Decrease the hardener content as needed to increase working time, minimum 2 ounce per gallon is needed for proper curing at >60°F. Important: At 65-80°F, 2 oz. by volume per gallon is typical. For faster cure time and/or colder temperatures, increase Key 9000 according to instructions, however, resin ambering will develop at 3 oz. and greater which will be noticeable with light colors or clear systems (quartz, chip systems). Cured resin will have some resilience.

Typical Batch Formula for Cove Base Mortar

Material	Typical Batch Wt.	Volume
Key 9540-H MMA	8.1 lbs.	1 gallon
Blended Mortar Aggregate or Quartz	20 lbs.	1.5 gallons
Pigment Pack (if used)	N/A	6.4 oz.
Hardener	N/A	Varies with temperature

Yield*: ±2.0 gallons Mortar (0.27 cu. ft.)

Yield*	± 2.0 gallons Mortar
Coverage	
1/8"	25 ft ²
3/16"	16 ft ²

*Note: Yield of mixed mortar will vary depending on mix design used.

The above formulation permits the installation of cove base or trench lining from 1/8" to 3/16" thickness.

APPLICATION

KEY 9540-H MMA and hardener powder are mixed and blended with aggregates for 3 minutes until no lumps are present. Apply to the fully cured primed surface using a cove trowel or flat trowel. **KEY 9540-H MMA Cove Base Mortar** must be sealed/top coated with the same **Key MMA Sealer** used for the floor system. If used for trench lining, consult with Key Resin for recommendations.

AVAILABILITY

Key Resins are available throughout the United States, Canada, Mexico and a number of other countries. Contact the **Key Representative** in your area. Telephone (888)943-4532 or visit www.keyresin.com.

STORAGE

Store in a cool and dry place, below 80°F, out of direct sunlight. Do not store near open flame or food. Shelf life is 6 months in the original unopened containers. After extended storage: Additives and fillers can separate with storage, materials should be inspected for any visible signs of settlement, polymerization, or paraffin coagulation (clumps, strands). Thoroughly mix pails or drums (use a drum mixer, do not rely on rolling drum on floor) and pour into new containers to inspect resin before use.

TECHNICAL SERVICE

Key Resin Company and **KRC Associates, Inc.** provide services and consultations on material selection, specification, troubleshooting, and other information on the proper repair and protection of concrete surfaces. **Key Resin Sales/Technical Representatives** are available to assist you. Telephone (888)943-4532 or visit www.keyresin.com.

WARRANTY

Information regarding Key Resin brand MMA resins and systems is based upon extensive research and experience in the field of applied engineering by the manufacturer **Plasti-Chemie GMBH International**. By making such information available, Key Resin does not thereby assume any liability beyond express terms of our standard limited material warranty. Key Resin does not warrant the accuracy or completeness of any such information, whether conveyed orally or in writing, but to the best of our knowledge believe it to be accurate. We reserve the right at any time and without notice to update or improve our products and process and our information concerning the same. By Key Resin making this information available does not relieve the purchaser or user from his obligation to verify the suitability of our products and processes for the intended use or application. The purchaser and user likewise have the responsibility to ensure that the purchase, use or application does not infringe upon patent rights or other rights of third parties.

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