Master Protective Coatings Inc.

Product Description

MPC-195 is a 100% solids, low exotherm two component epoxy casting system. It is ideal for deep pour casting for river tables, jewelry and embedding applications. Its long work time and low mixed viscosity helps avoid excess air entrapment and allows for excellent flow in tight crevices and around complex shapes. This product contains no VOC and when mixed/cured properly meets the requirements for direct food contact by the Canadian Food Inspection Agency.

Areas of application

- Casting tables
- o Embedding and encapsulation
- Casting jewelry and arts & crafts

Packaging

MPC- 195 is offered in the following kit sizes:

- o 3-gallon kit (7.56L resin (A) and 3.78L hardener (B))
- o Bulk and special packaging also available upon request

Metallic pigments are offered in 6 oz containers (1 pigment pod per 3-gallon kit)

Surface Preparation

Remove dust, dirt, grease, oil and all other contaminants with proper cleaner/degreaser. A seal coat is recommended on porous material to help prevent air bubble release during the curing process.

Mixing and Product Application

Warm up the resin and hardener to 24 - 27 °C. This will improve the flow characteristics and bubble release. In a dry, clean container mix 2 parts of resin with 1 part of hardener. Be sure to scrape the sides and bottom of the mixing container while mixing. Mix for 3-4 minutes using a paint paddle. After mixing, transfer the mix into a similar mixing container and mix again for another 1-2 minutes.

Pour material into the mold. Wait 15-20 minutes then lightly pass a lit propane torch over the surface at a 45° -degree angle with the tip of the torch being at least 6 inches from the surface until all bubbles are gone. The carbon dioxide at the end of the flame helps facilitate bubble release and popping the bubbles. This will help ensure a glass like finish. If latent bubbles exit, a similar torching at 30 minutes may be needed. Drips may be sanded off after the item has cured.

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Pour the epoxy to a maximum of 3" thick per layer. For large volume pours, maximum thickness should be reduced, and multiple pours are recommended. Mix only the amount that you need at one time and pour the mixture within 15 minutes. Unused resin and hardener should be left in original containers. Mix exact amounts of both resin and hardener in separate mixing cups. Do not add more hardener than resin, as this will cause the finished coating to remain sticky. Inaccurate measuring will cause epoxy surface to remain soft or sticky spots on the epoxy surface.

Clean equipment with xylene. Once the product has hardened, it may only be removed mechanically.

Product Restrictions

- o **MPC-195** should be stored in a dry place between 24° C and 27° C
- o Keep out of the sun and out of reach of children.
- o Resin and hardener should not be left in an open container.
- o Application should be used where humidity is under 60% and temperature is between 21°- 29°C.
- o Use a de-humidifier if needed.
- o MPC-195 should be used within one year of purchase.
- Surfaces may discolor in areas exposed to regular ultraviolet light.
- When properly mixed and cured, this epoxy system is safe for direct food contact. However, because the customer is mixing/pouring, each mixture/application would have to be assessed individually to say if it is 100% food safe.

Health and Safety

Components A and B contain toxic and corrosive ingredients. Consult the safety data sheet (S.D.S) for further information.

Technical Properties

Mix Ratio:	By volume: 2-parts resin (A) to 1-part hardener (B)	
	By weight: 100g of resin (A) to 45g of hardener (B)	
Viscosity:	Mixed: 500 – 600 cps	

785 rue Salaberry Laval, Québec, H7S 1H5 Phone: 1.800.324.5819 e-mail: info@mpcoatings.ca Innovative high-performance liquid polymers

MPC-195

EPOXY CASTING SYSTEM, DEEP POUR

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Recommended thickness

Thickness (in)	Thickness (mils)	Coverage (sq.ft./gal)	Coverage (gal. /sq.ft)
1/8"	125	12.80	0.08
1/4"	250	6.40	0.16
3/8"	375	4.27	0.23
1/2"	500	3.20	0.31
5/8"	625	2.56	0.39
3/4"	750	2.13	0.47
7/8"	875	1.83	0.55
1"	1000	1.60	0.63
1 1/8"	1125	1.42	0.70
1 1/4"	1250	1.28	0.78
1 3/8"	1375	1.16	0.86
1 1/2"	1500	1.07	0.94
1 5/8"	1625	0.98	1.02
1 3/4"	1750	0.91	1.09
1 7/8"	1875	0.85	1.17
2"	2000	0.80	1.25
2 1/8"	2125	0.75	1.33
2 1/4"	2250	0.71	1.41
2 3/8"	2375	0.67	1.48
2 1/2"	2500	0.64	1.56
2 5/8"	2625	0.61	1.64
2 3/4"	2750	0.58	1.72
2 7/8"	2875	0.56	1.80
3"	3000	0.53	1.88
3 1/8"	3125	0.51	1.95
3 1/4"	3250	0.49	2.03
3 3/8"	3375	0.47	2.11
3 1/2"	3500	0.46	2.19
3 5/8"	3625	0.44	2.27
3 3/4"	3750	0.43	2.34
3 7/8"	3875	0.41	2.42
4"	4000	0.40	2.50

Example: To cast a table 3 feet x 2 feet at a height of 2". Total area is 6 sq. ft. You will need $6 \times 1.25 = 7.5$ gallons

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POUR

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Physical Properties

Pot Life @ 25° C	360 minutes (6 hours)		
Tack-Free Time @ 25° C	72 - 96 hours depending on pour thickness		
Ideal Working Temperature Range	Optimal 24 - 27°C		
Castable Thickness	Up to 3 inches thick for 1 pour / dependant on the volume		
Peak Exotherm	38°C (100°F)		
Recommended Full Cure	7 days @ 25°C		
Tensile Strength	9500 psi		
Elongation	6.7%		
Flexural Strength	15500 psi		
Compression Strength	11700 psi		
Tg Ultimate	95°C (203°F)		
Hardness, Shore D	70 – 80		
VOC g/L	0 g/L		

Disclaimer and Product Warranty

MPC warrants that our products are free from manufacture defects in accordance with our quality control procedures. Any products proven defective are limited to the replacement of defective product or refund of the purchase price as determined by MPC. Please contact your local MPC sales representative for more information and warranty requirements.

The information and recommendations contained in this technical data sheet are based on reliable test results according to MPC. The data mentioned are specific to the material indicated. If used in combination with other materials, the results may be different. It is the responsibility of the user to validate the information therein and to test the product before using it. MPC assumes no legal responsibility for the results obtained in such cases. MPC assumes no legal responsibility for any direct, indirect, consequential, economic or any other damages except to replace the product or to reimbursement the purchase price, as set out in the purchase contract.

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