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TECHNICAL SHEET

CASTING EPOXY

PE700998 • PE700997 • PE700996

DESCRIPTION

Packaging: 1.42 L — PE700998 4.13 L — PE700997 12 L — PE700996

Passeport Élite Casting Epoxy is formulated for a long gel time, with low exothermic heat buildup and low viscosity. It allows for excellent bubble release and creates an ultra-durable surface that resists impacts, cracking, moisture and stains.

This crystal-clear and stunning finish is specially designed for all your river table, ocean table and deep pour projects.

AREAS OF APPLICATION

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

TECHNICAL DATA

Pot Life at 25°C (77°F)	6 hours	
Tack-Free Time at 25°C (77°F)	72 to 96 hours	
Ideal Working Temperature Range	Between 24 and 27°C (75 and 80°F)	
Castable Thickness	Maximum of 3 inches (7.5 cm) per layer (for pours over 18 L in volume, reduce thickness)	
Peak Exotherm	38°C (100°F)	
Recommended Full Cure	7 days at 25°C (77°F)	
Tensile Strength	9 500 psi	
Elongation	6.7%	
Flexural Strength	15 500 psi	
Compression Strength	11 700 psi	
Tg Ultimate	95°C (203°F)	
Hardness, Shore D	70 to 80	
VOC	0 g/L	
Mix Ratio	By volume: 2 parts resin A to 1 part hardener B By weight: 100 g of resin A to 45 g of hardener B	

1/5

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Viscosity Mixed: 500 to 600 cps

RECOMMENDED THICKNESS

Thickness (in.)	Thickness (mils)	Coverage	Coverage
<u> </u>	. ,	(sq.ft./gal)	(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	1 125	1.42	0.70
1 1/4	1 250	1.28	0.78
1 3/8	1375	1.16	0.86
1 1/2	1 500	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	3 1 2 5	0.51	1.95
3 1/4	3250	0.49	2.03

2/5

TECHNICAL SHEETCasting Epoxy
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3 3/8	3 3 7 5	0.47	2.11
3 1/2	3 500	0.46	2.19
3 5/8	3 625	0.44	2.27
3 3/4	3 750	0.43	2.34
3 7/8	3 8 7 5	0.41	2.42
4	4 000	0.40	2.50

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

SURFACE PREPARATION

Proper surface preparation is crucial. The surface must be completely dry and free from dust, wax, grease and oil. It is recommended that you coat porous material with Passeport Élite Countertop Epoxy to seal the material and prevent air bubbles from releasing during the curing process. Allow 16 to 24 hours for Countertop Epoxy to dry before applying Casting Epoxy.

NOTE: For projects where a high bond strength is important, keep in mind that you can get a higher strength by not applying a seal coat. If the seal coat has cured for more than 24 to 36 hours (depending on the temperature), mechanically abrade the surface and clean it before applying Passeport Élite Casting Epoxy.

MIXING

Warm up the resin and hardener to 24°C - 27°C. This will improve flow and bubble release.

Measure out the **exact quantities** of resin (component A) and hardener (component B) into two separate containers (2 parts resin A to 1 part hardener B). Stir them separately. Mix the resin with the hardener in a clean, dry container. Stir for 3 to 4 minutes, making sure to scrape the sides and bottom of the container. After mixing, transfer the mixture to a similar container and stir again for 1 to 2 minutes.

IMPORTANT

It is essential to accurately measure and properly mix the components. The product should be applied within 1 hour of mixing but will work for upwards of 6 hours. Bond strength may be affected if pour is delayed.

APPLICATION

Pour the mixture into the mould. Wait 15 to 20 minutes, then lightly pass a propane torch over the surface at a 45-degree angle, with the tip of the torch at least 6 inches (15 cm) from the surface. Continue until all bubbles are gone.

The carbon dioxide at the tip of the flame helps the bubbles to release and pop.

3/5

TECHNICAL SHEET
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If hidden bubbles appear 30 minutes later, you may need to torch the surface again, using the same technique. Drips can be sanded away after the item has cured.

Pour the epoxy to a maximum thickness of 3 inches (7.5 cm) per layer. For pours over 18 L in volume, you should reduce the maximum thickness and do multiple pours.

IMPORTANT

The product will start to cure quickly if exposed to excessive heat.

CURING TIME

Allow a minimum curing time of 84 hours for the epoxy to dry and at least 7 days for it to fully cure. The temperature, volume and humidity will affect the curing time.

CLEANING

Clean all tools with xylene immediately after use. Always keep your goggles and gloves on to avoid any contact with the product. Wash hands thoroughly with soap and water.

IMPORTANT

Once the product has cured, it can only be removed by sanding.

RESTRICTIONS

- Store in a dry area between 24°C and 27°C. Keep out of direct sunlight. Keep out of the reach of children.
- Unused resin and hardener should be left in original containers. Do not leave resin or hardener in an open container.
- Apply only when humidity is below 60% and air temperature is between 21°C and 29°C.
- This product must be used within one year of the purchase date.
- Epoxy surface may discolour if exposed to ultraviolet rays.
- Do not apply outside.
- 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 (SDS) for further information.

Always wear safety goggles, nitrile gloves and long sleeves and pants to avoid any contact with

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the product. If the product comes in contact with your skin, wash the area immediately with warm soapy water and rinse thoroughly.

RESPONSIBILITY

The user assumes full responsibility for use in accordance with instructions from the product's technical sheet.

IMPORTANT NOTICE

The information mentioned in this document is prepared to the best of our current knowledge and does not pretend to be complete. It is possible that an updated version of this document is available on the Passeport Élite website. In case of discrepancy, the latter takes precedence over the printed document. User is responsible to evaluate the best choice of product according to surface type and present situation before use. For more information, please contact our customer service.

