



V-822 A/B

85 SHORE D

POLYURETHANE CASTING SYSTEM

DESIGNED FOR VACUUM CASTING PROCESSES

PRODUCT DESCRIPTION:

V-822 A/B is a rigid, 85 Shore D, two-component, high impact and high strength castable polyurethane. V-822 A/B has been designed to meet a wide variety of part-making applications that range from electronic enclosures to mechanical parts. This system is very light in color and its translucency makes it extremely easy to color. V-822 A/B can also be demolded in one to two hours, depending on part thickness and mold conditions. The V-822 A/B has a work time of approximately 3.5 minutes and vacuum casting equipment is recommended for processing. V-822 A/B does not contain mercury catalyst.

PRODUCT HIGHLIGHTS:

- High impact resistance and flexural strength
- Low viscosity and rapid flow out for thin wall parts
- Non-mercury based catalyst system

PHYSICAL PROPERTIES:

Hardness, Shore D ASTM D-2240	85
Specific Gravity, (g/cc) cured ASTM D-792.....	1.18
Cubic Inches Per Pound	24.4
Color/Appearance.....	Translucent Light Yellow
Tensile Strength, (psi) ASTM D-638	9,870
Tensile Modulus, (psi) ASTM D-638	3.4×10^5
Elongation, (%) ASTM D-638	7.5
Flexural Strength, (psi) ASTM D-790	14,300
Flexural Modulus, (psi) ASTM D-790.....	4.0×10^5
Shrinkage, (in./in.) linear (12" x 1/2" x 1/2").....	0.003
Izod Impact, (ft.-lb./in.) ASTM D-256.....	1.00
Heat Deflection Temperature, (@ 66 psi) ASTM D-648.....	177°F (81°C)

(Note: Physical properties obtained from test specimens were post cured per recommended procedure.)

HANDLING PROPERTIES:

Mix Ratio (by weight):	
Part A.....	100 parts by weight
Part B.....	87 parts by weight
Mix Ratio (by volume):	
Part A.....	100 parts by volume
Part B.....	100 parts by volume
Specific Gravity, (g/cc):	
Part A.....	1.21
Part B.....	1.05
Viscosity, (cps) @ 77°F (25°C) Brookfield:	
Part A.....	120
Part B.....	500
Mixed.....	380
Color:	
Part A.....	Light Yellow
Part B.....	Clear Colorless
Work Time, 100g mass @ 77°F (25°C).....	3.5 minutes
Demold Time @ 77°F (25°C).....	1 - 2 hours

POST-CURING RECOMMENDED PROCEDURE:

After demolding, allow parts to further cure at room temperature for approximately 2 - 4 hours. It is recommended that parts be stage cured at 120° - 130°F (49° - 54°C) for 2 - 4 hours, followed by 4 - 6 hours at approximately 180°F (82°C). Support may be needed for certain configurations during this process.

NOTE:

It is very important to pre-warm the “B” component to 75° - 85°F (24° - 29°C) and thoroughly mix, stirring to the bottom of the container until the material becomes uniform in appearance.

STORAGE:

Store in a cool dry place. Unopened containers will have a shelf life of 3 months from date of shipment when properly stored at room temperatures. Purge opened containers with dry nitrogen before re-sealing. Electric band heaters for material feed containers may be required during cold weather periods.

PACKAGING:

1 Gallon kits	8 lbs. A, 7 lbs. B
5 Gallon kits	40 lbs. A, 35 lbs. B

SAFETY PRECAUTIONS:

Use in a well-ventilated area. Avoid contact with skin using protective gloves and protective clothing. Repeated or prolonged contact on the skin may cause an allergic reaction. Eye protection is extremely important. Always use approved safety glasses or goggles when handling this product.

IF CONTACT OCCURS:

Skin: Immediately wash with soap and water. Remove contaminated clothing and launder before reuse. It is *not* recommended to remove resin from skin with solvents. Solvents only increase contact and dry skin. Seek qualified medical attention if allergic reactions occur.

Eyes: Immediately flush with water for at least 15 minutes. Call a physician.

Ingestion: If swallowed, call a physician immediately. Remove stomach contents by gastric suction or induce vomiting only as directed by medical personnel. Never give anything by mouth to an unconscious person.

Refer to the Material Safety Data Sheet before using this product.

NON-WARRANTY "Except for a warranty that materials substantially comply with the data presented in Manufacturer's latest bulletin describing the product (the basis for this substantial compliance is to be determined by the standard quality control tests generally performed by Manufacturer), all materials are sold "AS IS" and without any warranty express or implied as to merchantability, fitness for a particular purpose, patent, trademark or copyright infringement, or as to any other matter. In no event shall Manufacturer's liability for damages exceed Manufacturer's sale price of the particular quantity with respect to which damages are claimed."