



V-855 A/B

82 SHORE D

POLYURETHANE CASTING SYSTEM

PRODUCT DESCRIPTION:

V-855 A/B is a rigid, 82 Shore D, two-component, high impact and high strength castable polyurethane. V-855 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 translucent white in color and it is very easy to color using BJB's Pigment dispersions. V-855 A/B can also be demolded in one to two hours, depending on part thickness and mold conditions. The V-855 A/B has a work time of 3 minutes.

PRODUCT HIGHLIGHTS:

- High impact resistance and flexural strength
- Low viscosity and rapid flow out for thin wall parts
- Easy to color

PHYSICAL PROPERTIES:

Hardness, Shore D ASTM D-2240	82
Specific Gravity, (g/cc) cured ASTM D-792	1.20
Cubic Inches Per Pound	24.3
Color/Appearance.....	Translucent White
Tensile Strength, (psi) ASTM D-638	8,750
Tensile Modulus, (psi) ASTM D-638	3.1×10^5
Elongation, (%) ASTM D-638	10
Flexural Strength, (psi) ASTM D-790	12,600
Flexural Modulus, (psi) ASTM D-790.....	3.5×10^5
Shrinkage, (in./in.) linear (12" x 1/2" x 1/2").....	0.003
Izod Impact, (ft.-lb./in.) ASTM D-256.....	1.23
Heat Deflection Temperature, (@ 66 psi) ASTM D-648.....	150°F (66°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.....	88 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.....	1.06
Viscosity, (cps) @ 77°F (25°C) Brookfield:	
Part A.....	120
Part B.....	550
Mixed.....	350
Color:	
Part A.....	Amber
Part B.....	Translucent White
Work Time, (100-gram mass) @ 77°F (25°C)	3 minutes
Demold Time @ 77°F (25°C), (depending on mass & section thickness)	1 - 2 hours

POST-CURING RECOMMENDED PROCEDURE:

After demolding, allow parts to further cure at room temperature for 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 150°F (66°C). Support may be needed for certain configurations during this process.

NOTE:

Pre-warming A & B components and molds to approximately 95° - 105°F (35° - 41°C), will expedite demolds on thin section castings.

STORAGE:

Store in a cool dry place. Unopened containers will have a shelf life of 6 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, 7.1 lbs. B
5 Gallon kits	40 lbs. A, 35.2 lbs. B
55-Gallon drum kits	400 lbs. A, 352 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.