

Advanced Materials**Epocast® 35-A Resin
Hardener 927****EPOXY LAMINATING SYSTEM**

- High Temperature Performance
- Non-VCHD, Non-MDA
- Long Work Life

DESCRIPTION :

Epocast® 35-A resin/Hardener 927 epoxy laminating system is a two-component, solvent-free material designed to perform at temperatures up to 300°F (149°C). The medium-viscosity liquid laminating system readily wets glass fabrics; its long work life supports extended fabrication times for large composite repairs. Epocast® 35-A resin/Hardener 927 epoxy laminating system is well suited for repair or fabrication of laminated composite structures and other applications requiring good high-temperatures properties. Epocast® 35-A resin/Hardener 927 epoxy laminating system is qualified to BMS 8-214.

TYPICAL PROPERTIES AS RECEIVED :

<u>Property</u>	<u>35-A</u>	<u>927</u>	<u>35-A/927</u>	<u>Test Method</u>
Color	Amber	Dk. Amber	Amber	Visual
Density, g/cc.	1.19	1.00	1.13	ASTM-D-792
Viscosity, cP at 77°F (25°C)	3,200	25,000	7,000	ASTM-D-2196
Work life, 100 gms at 77°F (25°C)	--	--	4-5	ASTM-D-1338
Shelf life at 77°F (25°C), unopened, months	12	12	--	--

MIX RATIO :

To 100 parts by weight of Epocast® 35-A resin, add 25 parts by weight of Hardener 927. Mix both components thoroughly for several minutes to insure a complete and uniform mixture.

CURE SCHEDULE :

Cure #1: Four hours at 180°F (83°C)

Cure #2: Two hours at 250°F (121°C)

TYPICAL CURED PROPERTIES (Not for specification purposes)

Tested on 12-ply laminate, 1581 glass fabric, resin content 31%

	<u>Cure #1</u>	<u>Cure #2</u>	<u>Test-Method</u>
Durometer hardness, Shore D	93	93	ASTM-D-2240
Flexural strength, as cured, at 77°F (25°C), Ksi (MPa)	77.4 (534)	104.0 (717)	ASTM-D-790
After two hours boiling water, at 77°F (25°C)	52.1 (359)	68.6 (473)	--
Flexural modulus, as cured, at 77°F (25°C), Msi (MPa)	3.02 (20,827)	3.80 (26,206)	--
After two hours boiling water, at 77°F (25°C)	2.77 (19,103)	3.48 (24,000)	--
Compressive strength, as cured, at 77°F (25°C), Ksi (MPa)	61.4 (423)	71.9 (496)	ASTM-D-695
Tested at 300°F (149°C)	2.0 (13.8)	3.4 (23.4)	--
Compressive Modulus, as cured, at 77°F (25°C), Msi (MPa)	3.75 (25,862)	4.03 (27,793)	--
Test at 300°F	0.937 (6,462)	1.36 (9,379)	--
Tensile Lap Shear, AL/AL, as cured, 77°F (25°C), psi (MPa)		1090 (7.5)	ASTM-D-1002

**STORAGE/
SHELF LIFE :** Epoxy resins and hardeners should be stored in a dry place in their original, sealed containers at temperatures from 60-100°F (16-38°C). Material temperatures should be above 65°F (18°C) when mixing. After use, tightly reseal containers.

Under these conditions, epoxy resins and hardeners will remain useable for 12 months from date of shipping from Huntsman.

CAUTION :

Huntsman Advanced Materials Americas Inc. maintains up-to-date Material Safety Data Sheets (MSDS) on all of its products. These sheets contain pertinent information that you may need to protect your employees and customers against any known health or safety hazards associated with our products. Users should review the latest MSDS to determine possible health hazards and appropriate precautions to implement prior to using this material. Copies of the latest MSDS may be requested by calling our customer service group at 800-367-8793 or emailing your request to adhesives_group@huntsman.com.

FIRST AID !

Eyes and skin: Flush eyes with water for 15 minutes. Contact a physician if irritation persists. Wash skin thoroughly with soap and water. Remove and wash contaminated clothing before reuse.

Inhalation: Remove subject to fresh air.

Swallowing: Dilute by giving water to drink and contact a physician promptly. Never give anything to drink to an unconscious person.

KEEP OUT OF REACH OF CHILDREN

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Main Offices :

Huntsman Corporation
10003 Woodloch Forest Dr.
The Woodlands
Texas 77380
(281) 719-6000

**Huntsman Advanced Technology
Center**
8600 Gosling Rd.
The Woodlands
Texas 77381
(281) 719-7400