



2132A RESIN 9284B, 9286B & 9282B HARDENERS

HIGH TEMPERATURE EPOXY SURFACE COAT
TECHNICAL DATA BULLETIN

SYSTEM BENEFITS:

CPD 2132A Resin with 9284B, 9286B or 9282B Hardener is a thixotropic, aluminum filled surface coat system designed for use where temperatures may reach 350°F. The system gels at room temperature, but a post cure is required achieve ultimate properties. It is excellent for wet lay-up/vacuum bagged parts, autoclaved parts, and compression molded parts.

- Surface coat
- High temp
- Aluminum filled

HANDLING PROPERTIES

	CPD 9284B	CPD 9286B	CPD 9282B	Test Method
Resin Density at 25°C, lbs/gal	11.8	11.8	11.8	ASTM D1475
Hardener Density at 25°C, lbs/gal	8.1	8.1	8.1	ASTM D1475
Resin Viscosity at 25°C, cP	Thixotropic	Thixotropic	Thixotropic	ASTM D2196
Hardener Viscosity at 25°C, cP	40	40	40	ASTM D2196
Mix Ratio by Weight	100A : 10B	100A : 10B	100A : 10B	Calculated
Mix Ratio by Volume	7A : 1B	7A : 1B	7A : 1B	Calculated
Initial Mixed Viscosity 25°C, cP	Thixotropic	Thixotropic	Thixotropic	ASTM D2196
Gel Time at 25°C, 150g mass, min.	30	60	120	ASTM D2471
Sag Test 1/16 inch	Pass	Pass	Pass	Visual
Sag Test 1/8 inch	Fail	Fail	Fail	Visual

PHYSICAL PROPERTIES

	CPD 9284B	CPD 9286B	CPD 9282B	Test Method
Color	Grey	Grey	Grey	Visual
Izod Impact, Notched, ft-lb/in	1.16	1.16	1.16	ASTM D256
Tensile Strength, psi	7,800	7,800	7,800	ASTM D638
Tensile Modulus, psi	320,000	320,000	320,000	ASTM D638
HDT, Post Cure, °F	355	355	355	ASTM D648
CTE, in/in/ °F	2.45×10^{-5}	2.45×10^{-5}	2.45×10^{-5}	ASTM D696
Compressive Strength, psi	28,500	28,500	28,500	ASTM D695
Flexural Strength, psi	13,000	13,000	13,000	ASTM D790
Flexural Modulus, psi	340,000	340,000	340,000	ASTM D790
Cured Density, g/cm ³ (lbs/in ³)	1.35 (0.049)	1.35 (0.049)	1.35 (0.049)	ASTM D792
Volumetric Yield, in ³ /lb	20.4	20.4	20.4	ASTM D792
Hardness, Shore D	92	92	92	ASTM D2240
Linear Shrinkage, in/in	<0.002	<0.002	<0.002	ASTM D2566

SYSTEM POST CURE OPTIONS:

Select one of the following cure schedules depending on the available time, the physical properties of the mold and the desired physical properties of the final part. Post cure the part to obtain maximum physical and thermal properties of the system. The recommended post cure temperature ramp rate between stages is up 5°F per minute for heating and down 1-2°F per minute for cooling. Heating and cooling ramp rates can vary based on size and thickness of the part. For larger thicker parts use a more conservative ramp. If you need to deviate from the recommended post cure schedule, please contact our technical service department.

CURE INCREMENTS:

	24 Hours at 77°F (25°C)	2 Hours at 150°F (66°C)	4 Hour at 150°F (66°C)	1 Hour at 200°F (93°C)	1 Hour at 250°F (121°C)	1 Hour at 300°F (149°C)	1 Hour at 350°F (177°C)
CPD 9284B, 9286B & 9282B							
Post Cure Option 1	Supported	Supported		Supported	Supported	Supported	Supported
Post Cure Option 2	Supported		Supported	Unsupported	Unsupported	Unsupported	Unsupported

MIXING AND SURFACE PREP:

Always use the recommended mix ratio for the system. Do not deviate in an attempt to speed up or slow down gel time. Mix together thoroughly, scraping sides and bottom of mixing container, until no streaks or striations are visible, then use immediately. Use only clean dry tools for mixing and applying. Do not mix or apply below 60°F. All surfaces must be clean, dry, and free of any surface contamination. Molds and patterns should be treated with release or parting agents.

STORAGE AND CRYSTALLIZATION:

Store between 60-90°F in a dry place. After use, tightly reseal all containers and store products on a raised surface during cold weather and avoid storing near outside walls or doors. If available, Purge with dry nitrogen to preserve color and minimize moisture contamination. Do not allow to freeze during winter storage. Do not use material with any signs of crystallization such as solid chunks, grainy texture or white color. Crystallization can be reversed by heating the material to 125-140°F, and stirring occasionally, until all crystals dissolve.

SAFETY HANDLING:

Wear protective gloves, clothing, and eye/face protection. Use only outdoors or in a well-ventilated area. Avoid contact to the skin and eyes. Avoid breathing dust, fumes, gas mist, vapors and spray. Wash hands thoroughly after handling. Take off contaminated clothing and wash before reuse. These products may cause skin and respiratory allergic reactions. Consult product Safety Data Sheets for complete precautions for use of this product.

Polytek Development Corp. has experience only in the compounding of resins and hardeners and not in the actual manufacture of tools or parts. Each piece is different. The user should run tests to assure the suitability of the system for use in a particular application. The test data and results set forth herein are based on laboratory work and do not necessarily indicate the results that the buyer or user will attain.

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