



**epoxy tech**<sub>mcs inc.</sub>  
**east system**®

8241 ALFRED BROUSSEAU, MONTRÉAL, QC, H1E 3H5  
 www.epoxytech.com

Tel.: (514) 881-2727  
 Fax: (514) 881-2001

**Technical Data Sheet**

**MARINE SYSTEM**

**1029/846**

**CLEAR LAMINATING/INFUSION SYSTEM**

**(Low viscosity, good flow, intermediate working time)**

**Description:**

The 1029R/846H is a two component, 100% solid epoxy system, designed as a laminating / infusion system. This low viscosity, good flow, long working time system is an excellent wetting agent for different fabric types. It is convenient for VARTM (Vacuum Assisted Resin Transfer Molding) process in fabrication of larger pieces. Though it cures at room temperature, it requires an appropriate post cure to obtain the maximum properties.

**Uses:**

**Laminating resin:**

May be used to laminate fiberglass, carbon fibers, Kevlar and other similar fabrics.

**Infusion:**

May be used as an infusion system where reduction of wasted resin and elimination of wet lay up procedure is desired.

**Typical uncured properties:**

Components	Mixing Ratio		Specific Gravity	Viscosity	Packaging				Color
	By weight # Parts	By volume # Parts			Liters				
				Brookfield @ 25 <sup>o</sup> C mPa.s (cps)					
Resin	100	100	1.13	550 - 650	7.56	20	40	200	Clear
Hardener	27	33	0.92	10 - 50	3.78	10	20	100	Clear
Mix			1.08	250 - 300	<b>11.34</b>	<b>30</b>	<b>60</b>	<b>300</b>	Clear

**Shelf life: 12 months**

**Gel time:**

Minutes	Temp. °C	Mass (gr.)
130 - 135	22	500

**Reactivity of mixture at 22°C:**

Maximum exothermic temperature of 500g of mixture, °C:	229
Time to reach maximum exothermic temperature of 500g of mixture, mins	140
Time to reach 50°C of 500g of mixture, mins:	128

**Change of viscosity during working time:**

After	0 mins:	280cps
	30 mins:	260cps
	60 mins:	230cps
	90 mins:	210cps

**Post-Cure schedule:**

After gelling at room temperature, the following post-cure schedule is recommended:

Number of hours	Temperature °C
2	80
2	120

**IMPORTANT :**

Temperature limitations of the mold or model will dictate whether it can be used as the supporting structure during post-cure cycle. If the tool must be withdrawn from the model for the post-cure, a supporting frame must be provided.

**Typical cured properties:**

	ASTM	
Tensile strength, psi:	D-638	9 297
Tensile Modulus	D-695	424 960
Compressive strength, psi:	D-695	13 053
Flexural strength, psi:	D-790	18 705
Flexural Modulus, psi:	D-790	481 400
Hardness, Shore D:	--	88-89
Elongation, %:	D-638	6.19
TG, °C	--	109

**Mixing:**

1. Mix 1029 resin only with 844 hardener.
2. Do not use damaged or leaking containers.
3. Premix resin and hardener separately. Then place the hardener into the resin container according to the required mixing ratio.
4. Blend the hardener into the resin thoroughly using a paddle attached to a low speed heavy duty electric drill at 300-600 rpm. Continue to mix for a minimum of 3 minutes or until the mix becomes homogenous
5. Never dilute with solvents.

**Cleaning of tools:**

Tools and equipment should be cleaned immediately after use with Epoxy Tech's #17 solvent or with Epoxy Tech's "Clean tool" #4 for a safer use.

**Storage:**

Keep containers closed until just before use at a temperature above 15°C.

**Caution:**

Keep resin and hardener away from eyes and skin. Avoid breathing of vapors and use good ventilation. Like any reactive material, uncured resin and hardener may irritate sensitive skin. Wear protective clothing, goggles and gloves.

**FIRST AID:**

**Eyes:**

Flush immediately with plenty of water for 15 minutes and obtain medical aid.

**Skin:**

Clean skin with warm water and a soft soap. Never use solvents to remove material from skin.

**Revision Date :** 08/2004

**Replacing:** 07/2004

**NOTE:**

The technical data and recommendations contained in this bulletin are correct to the best of our knowledge. The properties shown on this data sheet are not the maximum or minimum values that can be obtained, but only representative data for your guidance. Since the conditions of their use are beyond our control, no warranty or guarantee, expressed or implied, is made for the materials herein described, by us or any of our dealers. We suggest that you evaluate the information presented prior to use. Neither we or any of our dealers represent or warrant that the materials or their use thereof, either alone or in combination with other materials, will not infringe a patent or patents owned by third parties.