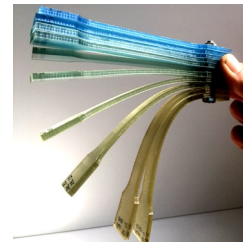# resoltech
ADVANCED TECHNOLOGY RESINS

RESOLTECH

Blends of 1050 and 1600 systems

Rigid to flexible laminating epoxy resin

- ■ **Elongation at break can be set between 4.5% and 80%**
- ■ **Manufacture of flexible composites**
- ■ **High impact and fatigue resistance**

MIXING

1. Mix the resin 1050 with its hardener, **strictly respecting the mixing ratio** as shown in the 1050 DataSheet.
2. Mix the resin 1600 with the hardener 1606, **strictly respecting the mixing ratio** as shown in the 1600 DataSheet.
3. Then, mix the two systems with any ratio.

MECHANICAL PROPERTIES

All the results shown above were obtained with :
- ■ 1050 resin and 1055S hardener
- ■ 1600 resin and 1606 hardener

The samples were **post cured at 60°C for 16h** in order to show the maximum mechanical properties, but **both systems are room temperature curing and may be used at room temperature.**
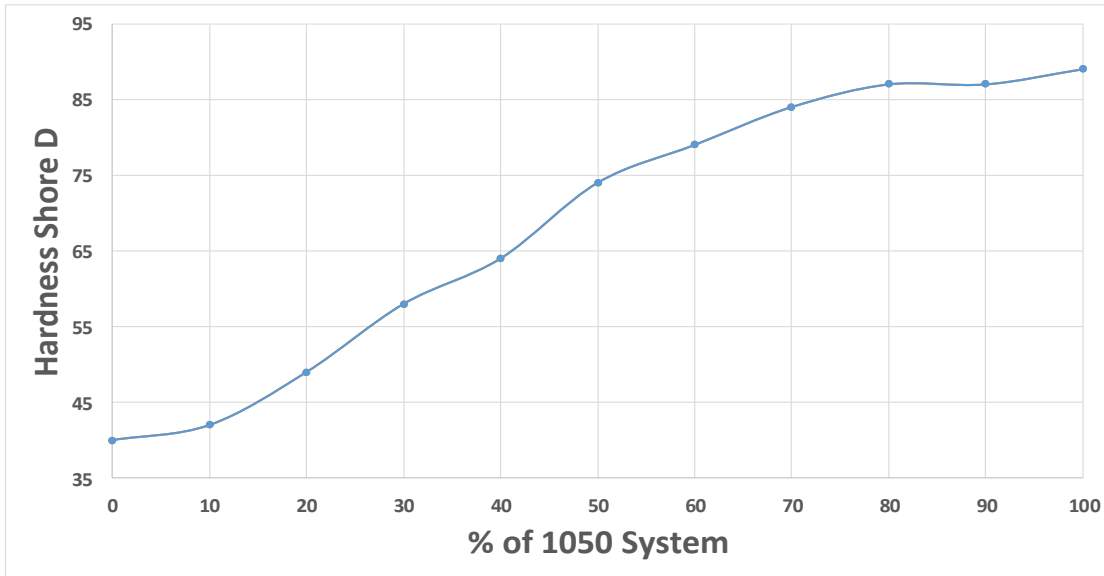
Hardness shore D, according to ISO 868

1600 (%) Weigtht	100	90	80	70	60	50	40	30	20	10	
1050 (%) Weigtht		10	20	30	40	50	60	70	80	90	100
Hardness Shore D	40	42	49	58	64	74	79	84	87	87	89

RESOLTECH

Blends of 1050 and 1600 systems

Evolution of Shore D Hardness

Tensile properties, according to ISO 527

All the results shown above were obtained with :

■ 1050 resin and 1055S hardener
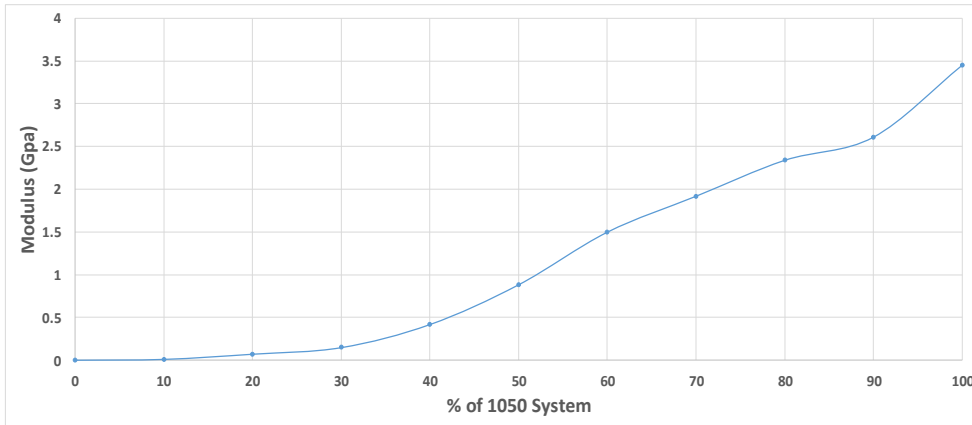
■ 1600 resin and 1606 hardener

The samples were **post cured at 60°C for 16h** in order to show the maximum mechanical properties, but **both systems are room temperature curing and may be used at room temperature.**

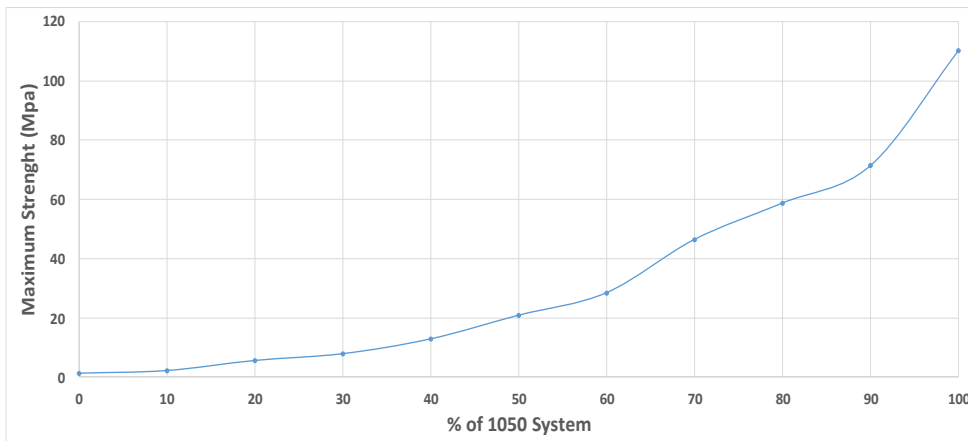| 1600 (%)	100	90	80	70	60	50	40	30	20	10	
1050 (%)	0	10	20	30	40	50	60	70	80	90	100
Modulus (GPa)	0.0026	0.0125	0.073	0.15	0.42	0.885	1.5	1.92	2.34	2.61	3.45
Elongation (%)	72	80	67	55	37.5	18	11	5.1	4.5	4.5	4.5
R max (Mpa)	1.20	2.10	5.50	7.80	12.8	20.8	28.4	46.4	58.7	71.3	110

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Blends of 1050 and 1600 systems

Evolution of Tensile Modulus

Evolution of Maximum Strenght

Evolution of Elongation at break

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