



**resoltech**  
ADVANCED COMPOSITE TECHNOLOGY

# 1050

## HIGH PERFORMANCE EPOXY LAMINATING SYSTEM

Advanced epoxy laminating system formulated to manufacture high performance structures with or without post-curing. The system is suitable for the manufacture of large structures and composite parts by contact, infusion and injection moulding. It features an adjustable working time from 15mn to 10 hours, a max. Tg of 75°C, optimised viscosity and low toxicity to the user. It is possible to release the parts from the mould without post-curing. The resulting structures will have very good mechanical properties. The system is also suitable for casting and filament winding applications.

### MIXING RATIO

The mixing ratio is constant whatever the hardener selected.

By weight: 100 + 35.

By volume: 7 + 3.

Hardeners available from very slow to fast: 1053, 1054, 1055, 1056, 1058, 1059.

**WARNING:** The mixing ratio must be accurately followed. It is not possible to change the ratio, it would result in lower mechanical properties. The mixture should be thoroughly stirred to ensure full homogeneity.

It is important to note that epoxy systems tend to heat up much faster in a pot than as a thin film. It is therefore necessary to only mix the necessary amount usable within the given pot life. Keeping the mixture in flat open containers reduces the risks of exothermic reaction.

### APPLICATION

The standard procedure of working with epoxy systems applies to the RESOLTECH 1050.

The system can be applied by brush, roller, infused or injected.

In case of laminating over a cured surface without peel ply, it is required to deglaze, clean and degrease the support prior to laminating.

For more information, please refer to the applications technical bulletins (TechNotes), available on request.

### CURING

Workshop conditions: 18 to 25°C, 70% humidity maximum.

Hardener	Pot life	Release time	Optimal cure
1053	10h	40h	14 days @ 20°C
1054	5h30	30h	or 15h @ 60°C
1055	3h30	20h	for all hardeners
1056	1h30	16h	
1058	40mn	8h	
1059	15mn	3h	

Pot life given for 70g @ 22°C.

Release time given for a temperature of 22°C.

## **MECHANICAL PROPERTIES**

Tensile strength	60MPa
Tensile modulus	3300MPa
Flexural strength	100MPa
Flexural modulus	3200MPa
Max Tg:	75°C

## **PHYSICAL PROPERTIES**

Resin aspect:	pale yellow liquid
Hardener aspect:	Clear liquid
Resin viscosity	1000mPas
Hardener viscosity	250 to 450mPas
Density of mixture	1.1

Above values given at 22°C.

## **PACKING & STORAGE**

Resoltech 1050 is available as follow:

1.35kg, 6.75kg, 37.8kg, 270kg.

Shelf life is one year in sealed containers as provided. Keep containers sealed and away from heat and cold.

## **HEALTH AND SAFETY**

It is advised to follow basic rules such as avoiding skin contact, wear masks when producing dust. Please read our standard health and safety sheet for more information.

In case of eye contamination, wash with water and seek medical advice.

More information is available on [www.resoltech.com](http://www.resoltech.com).

The data provided in this document is the result of tests and is believed to be accurate. We do not accept any responsibility over the mishandling of these products and our liability is limited strictly to the value of the products we manufacture and supply.

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[www.resoltech.com](http://www.resoltech.com)

35 Impasse Emeri. Pole d'activites. 13510 Eguilles. France  
export@resoltech.com Tel: +33 (0)442 950195 Fax: +33 (0)442 950198