

**Advanced Materials****RenLam<sup>®</sup> LW 5157 / Ren<sup>®</sup> HY 5159**

LAMINATING RESIN  
LAMINATING SYSTEM WITH ENHANCED HEAT RESISTANCE

**KEY PROPERTIES**

- Good wetting properties
- Long pot life
- Can be pre-cured at room temperature
- Enhanced dimensional stability under heat up to approximately 130 °C

**APPLICATIONS**

- Construction of vacuum deep-drawing and foam moulding tools
- Ancillary tooling and fixtures

**PRODUCT DATA**

Property	Unit	RenLam <sup>®</sup> LW 5157	Ren <sup>®</sup> HY 5159
Appearance Colour	visual	Liquid Grey	Clear liquid Pale Yellow
Viscosity at 25°C	mPa s	3300 - 5250**	120 - 175**
Density	g/cm <sup>3</sup>	1.32	0.98

*\*\* Specified data are on a regular basis analysed. Data which is described in this document as 'typical' is not analysed on a regular basis and is given for information purpose only. Data values are not guaranteed or warranted unless if specifically mentioned.*

**TYPICAL SYSTEM DATAS****PROCESSING**

Mix ratio	Parts by weight
RenLam <sup>®</sup> LW 5157	100
Ren <sup>®</sup> HY 5159	11

Mix the two components thoroughly in the ratio indicated, then impregnate each layer of cloth as it is laid up to construct the laminate.  
Post-curing will improve final properties.

**TYPICAL  
PROPERTIES**

Resin/Hardener mix:	Volume	Unit	LW 5157 HY 5159
Appearance			grey liquid
Viscosity at 25°C		mPa s	2,500 - 3,000
Pot life at 25°C	500 ml	min	40
Demoulding time		h	24

**After cure: Curing**

Pre-cure parts for 48 hours at 25°C, or for 8 hours at 60°C before demoulding, which should be carried out at room temperature.

Commence the post cure of the demoulded part at a temperature no higher than that of the pre-cure.

Raise the temperature of the oven by no more than 10°C per hour, until the part has reached 120°C. For optimum heat resistance hold the part for 14 hours at 120°C

Density	ISO 1183	g/cm <sup>3</sup>	1.3
Deflection temperature	ISO 75	°C	130

**STORAGE**

Provided that RenLam<sup>®</sup> LY 5157 and Ren<sup>®</sup> HY 5159 are stored in a dry place in their original, properly closed containers at the storage temperatures mentioned in the MSDS they will have the shelf lives indicated on the labels. Partly emptied containers should be closed immediately after use.

**WORKING  
CONDITIONS**

The product should be used when in the temperature range 18-25oC.

**PACKAGING**

System	LW 5157	HY 5159
Quantity and Weight	27 kg	6 x 0.8 kg
Quantity and Weight		

**HANDLING  
PRECAUTIONS****Caution**

Our products are generally quite harmless to handle provided that certain precautions normally taken when handling chemicals are observed. The uncured materials must not, for instance, be allowed to come into contact with foodstuffs or food utensils, and measures should be taken to prevent the uncured materials from coming in contact with the skin, since people with particularly sensitive skin may be affected. The wearing of impervious rubber or plastic gloves will normally be necessary; likewise the use of eye protection. The skin should be thoroughly cleansed at the end of each working period by washing with soap and warm water. The use of solvents is to be avoided. Disposable paper - not cloth towels - should be used to dry the skin. Adequate ventilation of the working area is recommended. These precautions are described in greater detail in the Material Safety Data sheets for the individual products and should be referred to for fuller information.

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