

Advanced Materials**RenLam[®] LY 113 / Ren[®] HY 97-1**

LAMINATING RESIN

LOW VISCOSITY LAMINATING SYSTEM WITH GOOD THERMAL PERFORMANCE

KEY PROPERTIES

- **Very low viscosity**
- **Excellent room temperature strength**
- **Excellent wetting out properties**
- **Elevated temperature resistance, up to 120°C**

APPLICATIONS

- Structural and special applications
- Wet lay-up laminating
- Resin infusion technique
- Laminated tools for RTM or RIM
- Composite components using glass, carbon or Aramid ply

PRODUCT DATA

Property	Unit	RenLam [®] LY 113	Ren [®] HY 97-1
Appearance Colour	visual	Yellowish liquide	Clear liquid
Viscosity at 25°C (ISO 2555)*	mPas	500 - 1000**	15 - 30**
Density (ISO 1675)	g/cm ³	1.16	0.92

** 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 purposes only. Data values are not guaranteed or warranted unless if specifically mentioned.

TYPICAL SYSTEM DATA**PROCESSING**

Mix ratio	Parts by weight
RenLam [®] LY 113	100
Ren [®] HY 97-1	30

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	LY 113 HY 97-1
Appearance			Yellowish
Viscosity at 25°C		m Pa s	300
Pot life at 25°C	500 ml	min	80
Demoulding time		h	24

After cure: 14h gradually up to 120°C

Density	ISO 1183	g/cm ³	1.1
Deflection temperature	ISO 75	°C	120

STORAGE

Provided that RenLam[®] LY 113 and Ren[®] 97-1 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 18-25°C.

PACKAGING

System	RenLam [®] LY 113	Ren [®] HY 97-1
Quantity and Weight	1 x 20 kg	1 x 6 kg
Quantity and Weight	1 x 200 kg	1 x 20 kg

**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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Huntsman Advanced Materials warrants only that its products meet the specifications agreed with the user. Specified data are analysed on a regular basis. Data which is described in this document as 'typical' or 'guideline' is not analysed on a regular basis and is given for information purposes only. Data values are not guaranteed or warranted unless if specifically mentioned.

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