

Advanced Materials

RenLam[©] LY 5210 / Ren[©] HY 2954 or Ren[©] HY 5158 or XB 5173

LAMINATING RESIN HIGH HEAT RESISTANT EPOXY SYSTEM

KEY PROPERTIES

- · Formulated to impregnate glass and carbon fibre
- Heat resistant up to 170-200 °C when fully cured
- Long pot life

APPLICATIONS

- · Production of heat resistant moulds and tools
- Prepreg tools
- Vacuum forming tools
- · Foam moulding tools

PRODUCT DATA

Property	Unit	RenLam [©] LY 5210	Ren [©] HY 2954	Ren [©] HY 5158	XB 5173
Appearance Colour	visual	Clear Liquid light brown	Clear liquid	Clear liquid yellow	Clear liquid pale yellow l
Viscosity at 25°C	mPa s	2300 - 3300**	85 – 100 **	800 - 1600**	10 - 40**
Density	g/cm ³	1.15 - 1.2	0.94 - 0.95	1.01	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 5210	100	100	100		
Ren [©] HY 2954	53				
Ren [©] HY 5158		25			
XB 5173			42		

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.



PROPERTIES

Resin/Hardener mix:	Volume	Unit	LY 5210 HY 2954	LY 5210 HY 5158	LY 5210 XB 5173
Appearance			Light yellow transparent	Light yellow transparent	Light yellow transparent
Viscosity at 25°C		mPa s	700 - 900	~ 2,400	~ 500
Pot life at 25°C	500 ml	h	7-9	4	6
Demoulding time		h	24 at 40℃	14h at 40℃	24 at 40℃

After cure: room temperature 24-48hours+ 2hours at $40 \,^{\circ}\text{C}$ + 2 hours at $60 \,^{\circ}\text{C}$ then equal stages to deflection temperature for 14 hours

Density	ISO 1183	g/cm ³	1.1	1.1	1.1
Deflection temperature	ISO 75	°C	~200	~ 170	~ 200

STORAGE

Provided that RenPaste® SV 4503-1 and Ren® HV 4503-1 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 18-25oC.

PACKAGING

System	LY 5210	HY 2954	HY 5158	XB 5173
Quantity and Weight	25 kg	25 kg	6.25 kg	190 kg
Quantity and Weight	1000 kg	180 kg	6 x 1 kg	4 x 4.5 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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