

**Advanced Materials****RenLam<sup>®</sup> LY 5138-2 / Ren<sup>®</sup> HY 5138**

LAMINATING RESIN  
LOW-VISCOSITY, UNFILLED, EPOXY SYSTEM

**KEY PROPERTIES**

- Low viscosity
- Contains neither solvent nor reactive diluent
- Very low colour
- Long pot life
- No tackiness even after curing at room temperature
- Thermal stability at 70 - 80°C with appropriate post curing

**APPLICATIONS**

- General mould and tool making, where increased thermal stability is required

**PRODUCT DATA**

| Property             | Unit              | RenLam <sup>®</sup><br>LY 5138-2 | Ren <sup>®</sup><br>HY 5138 |
|----------------------|-------------------|----------------------------------|-----------------------------|
| Appearance<br>Colour | visual            | Liquid<br>Slightly opaque        | Liquid<br>Clear             |
| Viscosity<br>at 25°C | mPa s             | 1500 - 2000**                    | 10 - 25**                   |
| Density              | g/cm <sup>3</sup> | 1.10 - 1.15                      | 0.90 - 0.95                 |

*\*\* 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 <sup>®</sup> LY 5138-2 | 100             |
| Ren <sup>®</sup> HY 5138      | 23              |

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  | RenLam <sup>®</sup> LY 5138-2<br>Ren <sup>®</sup> HY 5138 |
|---------------------|--------|-------|---|
| Appearance          |        |       | colourless  |
| Viscosity at 25°C   |        | mPa s | 500 - 700   |
| Pot life at 25°C    | 500 ml | min   | 60 – 90   |
| Demoulding time     |        | h     | 20 - 24   |

*After cure: 7 days at RT or 8 hours at 80 °C*

|                        |          |                   |       |
|------------------------|----------|-------------------|-------|
| Density                | ISO 1183 | g/cm <sup>3</sup> | 1.1   |
| Deflection temperature | ISO 75   | °C                | 75-80 |

**STORAGE**

Provided that RenLam<sup>®</sup> LY 5138-2 and Ren<sup>®</sup> HY 5138 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              | RenLam <sup>®</sup> LY 5138-2 | Ren <sup>®</sup> HY 5138 |
|---------------------|-------------------------------|--------------------------|
| Quantity and Weight | 225 kg                        | 20 kg                    |
| Quantity and Weight | 25 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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