

Laminating Resin

RenLam LY 5210/ Ren[®] HY 5158

Exceptional heat resistant epoxy system

Key properties

- Good wetting properties
- Long pot life
- Partial curing at room temperature completed with indicated post cure
- Exceptional heat resistance

Applications

- For heat- resistant tools with glass or carbon fibre fabrics
- Prepreg lay-up tools
- Parts and structures
- In combination with an appropriate gelcoat system to construct high temperature tools

Product data

| Property | Unit | RenLam LY 5210 | Ren HY 5158 |
|----------------------|-------------------|-----------------------|-----------------------------|
| Appearance Colour | visual | Clear liquid Brown | Clear liquid Pale yellow |
| Viscosity at 25°C | mPas | 2,300-3,300 | 1,000-2,000 |
| Density | g/cm ³ | 1.2 | 1.01 |

Processing

| Mix ratio | Parts by weight |
|----------------|-----------------|
| RenLam LY 5210 | 100 |
| Ren HY 5158 | 25 |

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 5158 |
|---------------------|--------|--------|------------------------|
| Appearance | | | Yellowish |
| Viscosity at 25°C | | m Pa s | 3,000 |
| Pot life at 25°C | 500 ml | min | 150 |
| Demoulding time | | h | 3-4 days RT /14 h 40°C |

After cure: 14h gradually up to 160°C

| | | | |
|------------------------|----------|-------------------|---------|
| Density | ISO 1183 | g/cm ³ | 1.1 |
| Deflection temperature | ISO 75 | °C | 160-170 |

Storage

The resin and hardeners described in this instruction sheet have the shelf lives shown provided they are stored at 6 - 28°C in a dry place and sealed containers, preferably those in which they are supplied.

Working conditions

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

Packaging

| System | LY 5210 | HY 5158 |
|---------------------|----------|------------|
| Quantity and Weight | 1 x 25kg | 1 x 6.25kg |
| Quantity and Weight | 4 x 5kg | 4 x 1.25kg |

Handling precautions

Caution

Vantico 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 Vantico publication No. 24264/3/e Hygienic precautions for handling plastics products of Vantico and in the Vantico Material Safety Data sheets for the individual products. These publications are available on request and should be referred to for fuller information.

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