

Gelcoat Resin

RenGel[®] SW 18 / Ren[®] HY 2404 or HY 5159

Temperature resistant polishable epoxy system

Key properties

- Excellent styrene resistance
- Polishable (high gloss)
- Heat resistant

Applications

- Production of wet lay-up tools
- Vacuum forming tools
- Polyester moulding
- RTM moulds

Product data

| Property | Unit | RenGel SW 18 | Ren HY 2404 | Ren HY 5159 |
|----------------------|-------------------|----------------|-----------------------------|-----------------------------|
| Appearance Colour | visual | Paste Green | Clear liquid Pale yellow | Clear liquid Pale yellow |
| Viscosity at 25°C | mPas | Thixotropic | 3,500-5,500 | 150-250 |
| Density | g/cm ³ | 1.3 | 1.0-1.0 5 | 0.98 |

Processing

| Mix ratio | Parts by weight | |
|--------------|-----------------|-----|
| RenGel SW 18 | 100 | 100 |
| Ren HY 2404 | 20 | - |
| Ren HY 5159 | - | 16 |

Mix the two components thoroughly in the ratio indicated.
 Apply in thin layers with a brush or spatula, wait until gelcoat has gelled, but ensure that it is still slightly tacky before proceeding.
 Post-curing will improve final properties.

Properties

| Resin/Hardener mix: | Volume | Unit | SW 18 HY 2404 | SW 18 HY 5159 |
|---------------------|--------|------|------------------|------------------|
| Appearance | | | Green | Green |
| Pot life at 25°C | 250 ml | min | 10-15 | 25 |
| Demoulding time | | h | 12 | 12 |

After cure: with HY 2404: 14 hours at 60 °C
with HY 5159: 14 hours gradually to 80°C

| | | | | |
|------------------------|----------|-----------------------|-------|-------|
| Density | ISO 1183 | g/cm ³ | 1.3 | 1.3 |
| Hardness | ISO 868 | Shore D | 85-90 | 85-90 |
| Deflection temperature | ISO 75 | °C | 85 | 100 |
| Abrasion | Taber | mm ³ /100U | 55-60 | 55-60 |

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 condition

The products should be handled when in the temperature range of 20 - 25°C.

Packaging

| System | SW 18 | HY 2404 | HY 5159 |
|---------------------|------------|----------|-----------|
| Quantity and Weight | 1 x 5kg | 6 x 1kg | 6 x 800gr |
| Quantity and Weight | 12 x 250gr | 6 x 50gr | 6 x 40gr |

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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