

# connora

# ReRez® Epoxy Resin E1903 with ReRez® R1103 Curing Agent

RECYCLABLE EPOXY SYSTEM FOR FAST CURING AT AMBIENT TEMPERATURES

## **Applications**

ReRez® Epoxy with ReRez® R1103 Hardener is specifically formulated for ambient temperature, fast curing, wet layup laminations, and coatings, such as in rapid prototyping, surfboard manufacturing, or marine and household repair.

#### WHY CHOOSE REREZ®

## Zero-Landfill Manufacturing:

• Composite manufacturing waste can be recycled, and re-integrated back into the composites supply chain. Reduce landfill costs, and improve product margins.

#### **Create Downstream Value:**

• Connora Recycling uses a low energy, solution-based process that allows both the resin and fiber reinformcements to be reclaimed in a high quality, virgin-like state, preserving performance and value.

#### **Cradle-To-Cradle Solution:**

• Composite products made with ReRez® are fully recyclable through Connora Technologies.

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# **Physical Properties**

ReRez® R1103 Hardener	
Viscosity (Brookfield, 25 °C)	50cPs ± 10cPs
Formulation with ReRez® Epoxy Resin E1903	
Parts amine / 100 parts Epoxy resin (by weight)	36.2
Mixed Viscosity (5 min; Brookfield, 25 °C)	700-800cPs
Pot life (100 g mass, 68-72 °C)	22 - 30cPs
Thin film set time (68-72 ºF)	2-3 hours
Tack free time (68-72 ºF)	4-5 hours
Through cure/ Sandability (68-72 ºF)	Overnight, >16 hours

### **Recommended Cure Cycles**

The suggested curing temperature range for ReRez® Epoxy system is between 20-60 oC. For optimal mechanical properties elevated temperature curing or 'post curing' is recommended.

# **Safety and Handling**

ReRez® hardeners are amine derived curing agents, as such they should be treated as a corrosive and an inhalation hazard. All persons who use, store, or transport these materials should properly understand the handling precautions and recommendations as stated in the MSDS.

#### **Industrial Recycling**

Recycling of composite waste is performed at Connora Technologies using a low energy, solution-based process. Outputs of the recycling process are an epoxy thermoplastic and all constituent components are recovered in a near virgin state, including reinforcements. For recycling of manufacturing waste, please contact Connora Technologies.

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