RAKU[®] FST RI-5503 / RH-5903 / AC-9253



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Modified Cyanate Ester Infusion System

Three component infusion system

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Key Properties

- Meets FST regulations
- Flows very well
- Unfilled, very low viscosity
- Very easy to process
- Temperature resistant

Processing Properties

| | | | RI-5503 | RH-5903 | AC-9253 |
|--------------------|-------------|-------|----------|---------|----------|
| Color / appearance | visual | | amber | clear | dark red |
| Mix ratio | | pbw | 81.30 | 16.26 | 2.44 |
| Viscosity at 25°C | ASTM D-4287 | mPa⋅s | 500-1000 | 50-200 | 30-180 |

| | | | RI-5503 / RH-5903 / AC-9253 |
|---------------------------|-------------|-------|-----------------------------|
| Initial viscosity at 25°C | ASTM D-4287 | mPa⋅s | 400-800 |
| Gel time at 60°C | ASTM D-2471 | min | 300-800 |

Cured / Mechanical Properties (approximate values)

| Material needs special cure cycle please contact the representative for more information | | | RI-5503 / RH-5903 / AC-9253 | |
|--|-------------|-------------------|-----------------------------|--|
| Color / appearance | visual | | Dark amber | |
| Density | ASTM D-792 | g/cm ³ | ca. 1.2 | |
| Glass Transition Temperature, Tg | ASTM D-3418 | °C | 145-155 | |

Applications

Resin infusion

RAKU-FST RI-5503 / RH-5903 / AC-9253

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| | | |

Processing

Decrystallization Procedure:

Should RAKU[®] FST RI-5503 crystallize, place in an oven with a thermocouple/thermometer in the resin, warm in an oven until the resin reaches 60°C - 70°C and mix to help melt the crystals and homogenize. Ensure that the mixture is completely dissolved and cooled to room temperature before continuing.

Mixing Procedure:

Degas individual components and mixtures.

Combine RH-5903 and AC-9253. AC-9253 needs to be mixed well before use as some ingredients might be prone to sedimentation. Cool down RI-5503 to room temperature before adding it to the mixture. Do not add warm RI-5503 to the mix!

The processing temperature should be between 20-30°C.

| Packaging | | |
|-------------------------------|----------|--|
| RAKU [®] FST RI-5503 | 10.00 kg | |
| RAKU [®] FST RH-5903 | 1.10 kg | |
| RAKU [®] FST AC-9253 | 0.32 kg | |

Storage

Original containers should be kept tightly sealed and stored at ambient temperatures 59-86°F (15°C to 30°C). If properly stored the products have the shelf-life indicated on the product label. Partly used containers should always be sealed appropriately and used up as soon as possible.

Handling Precautions

Good workplace ventilation is to be ensured during processing. At the same time, the employer's liability insurance association's industrial hygiene safety regulations regarding the handling of reaction resins and their hardeners are to be observed. Please take heed of the appropriate safety data sheets.

RAMPF Group, Inc. 49037 Wixom Tech Drive Wixom, MI 48393 T +1 248. 295.0223 F +1 248. 295.0224 E info.us@rampf-group.com

www.rampf-group.com

Our recommendations on the use of the material are based on many years of experience and current scientific and practical knowledge. They are, however, provided without any obligation on our part and do not relieve the buyer of the need for suitability tests. They do not constitute a legal relationship, nor are any protected third party rights whatsoever affected thereby.

