

MAKOBOND INFUSION RESIN 254

PRODUCT DESCRIPTION

Makobond IR 254 is a low viscosity, high temperature infusion resin designed for various parts and structures. IR 254 is easy mix and has a favorable flow which helps produce beautiful finished products leaving no voids. The IR 254 system cures well at room temperature but also provides service for higher temperature applications.

PRODUCT HIGHLIGHTS

- EASY MIXING
- HIGH TEMPERATURE APPLICATIONS
- NO VOIDS
- LASTING PARTS

PRODUCT CHARACTERISTICS

	IR 254A	IR 254B
Viscosity @ 25°C	1,800 cps.	20 cps.
Specific Gravity	1.14	0.98
Color	Clear	Amber

PHYSICAL PROPERTIES

	Results	ASTM Method
Cured Hardness (Shore D)	83-85D	D2240
Flexural Strength (psi)	18,412 psi.	D790
Flexural Modulus (psi)	403,501 psi	D790
Compressive Strength (psi)	15,163 psi.	D695
Tensile Strength (psi)	10,652 psi	D638
Tensile Modulus (psi)	410,003 psi	D638
Glass Transition Temperature, Tg, (DMA)	307°F	D4065

HANDLING PROPERTIES

Infusion Resin 254	
Mix Ratio By Weight, Resin, Hardener	100:20
Mix Ratio By Volume, Resin, Hardener	4.3:1
Mixed Viscosity @ 25°C	550 cps.
Pot Life @ 25°C	80-100 minutes

HANDLING AND CURING

Measure out the proper weights of IR 254 and mix until uniform and no streaks are present throughout. Be sure to scrape the sides and bottom on mixing container to avoid any unmixed material. Allow IR 254 to cure at room temperature for 18 hours prior to post cure. A post cure of 3 hours at 150°F, 250°F, 350°F is needed to reach full properties. The size of the laminate will change cure temperature and duration.

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PACKAGING WEIGHTS

	Quart Kit	Gallon Kit	Pail Kit	Drum Kit
IR-254A	2 lbs	8 lbs	40 lbs	500 lbs
IR-254B	0.4 lbs	1.6 lbs	8 lbd	100 lbs
IR-254 Kit	2.4 lbs	9.6 lbs	48 lbs	600 lbs

STORAGE AND SAFETY

Makobond IR 254 has a shelf life of 12 months from date of shipment when unopened and stored at ambient temperatures, (18-27°C). Nitrogen purging opened containers is recommended before re-sealing. IR 254B may darken over time, but this will have no effect on any finished product. Users need to exercise proper care while working with material; gloves, eyewear, and proper ventilation are recommended. Warning: All thermosetting matrix systems undergo exothermic reaction during vulcanization and/or curing, generating heat. If not properly managed, exothermic reactions may release possibly flammable or toxic gases into the surrounding. Users should exercise extreme caution when blending large volumes of ingredients (ie greater than 1 lb), and/or curing thick sections of components (typically greater than 0.200 inches). Users should monitor heat profiles of any curing or blended materials carefully and attentively during cure. Please contact a Mako team member with any concerns prior to use and/or to coordinate the proper management of safety and temperature monitoring process to avoid exothermic phenomena.