

18027 Bishop Ave.  
Carson, CA 90746  
Phone: 800-374-3872  
Fax: 310-202-7247  
[www.evroberts.com](http://www.evroberts.com)



**Technical Data Sheet**  
**RF 1350 A/B**  
**Low Viscosity Polyurethane Adhesive**

## Description

RF 1350M4 A/B is a two-part, quick curing, natural colored urethane adhesive/potting system. It has a shore A hardness between 60-65. This system was developed for potting connectors; small electronic components where flexibility is needed. RF 1350M4 A/B does not contain TDI or MOCA, and is easily mixed into a pourable material. When cured, this urethane system produces a flexible elastomer with excellent toughness, high elongation, and has very good adhesive strength to a variety of plastics. Other features are:

- Convenient mix ratio
- Low Viscosity, contains no solvents. 100% reactive
- Quick Curing
- Excellent Adhesion to a variety of substrates

## Instructions for Use

Weigh components according to parts by weight ratio into a non-reactive container (polyethylene, polypropylene, or metal derimmed can). Container should be about five times larger than the volume of the mixed material. Mix components very thoroughly, preferably with a metal spatula, scraping the sides and bottom of container to incorporate all material.

**NOTE:** Since this material gels in about 5-7 minutes, mix time and deairing should be done within 3-4 minutes max. A preferred packaging for this material would be in side-by-side tubes.

Remove the air entrapped during mixing by placing the container of mixed material into a vacuum chamber. Under vacuum, the level of mixed material will rise and then drop with strong bubble breaking action. Do not allow the contents to rise over the top of the container. Allow the material to degas (deair) until the liquid level drops and bubbling is minimal. Release vacuum. If working time allows, transfer material to a clean container without scraping sides or bottom. If working time does not allow transfer, then material can be used immediately. **NOTE:** Do not scrape sides or bottom of the container used for mixing as this may contain residual amounts of poorly mixed material and can leave a tacky surface or areas of uncured material in the part being casted/poured.

**Technical Data Sheet (Continued)**  
**RF 1350M4 A/B**

## Curing Instructions

**Mix Ratio by Volume:** 50 parts by vol. RF 1350M4 Part A to 100 parts by vol. RF 1350M4 Part B.

**Pot Life:** Do not mix more than can be applied in 3 minutes, although the gel time is about 5-7 minutes depending on the mass mixed and the ambient temperature. **NOTE:** Longer working time systems are available.

## Cure Schedule

Cure time depends on the temperature and mass of the curing material. Adequate cure is obtained in 24 hours at 77°F or 1-2 hours at 150°-175°F.

## Handling Properties

Property	RF 1350M4 A/B
Cure Schedule	24 hours @ RT or 1-2 hours @ 150-175°F
Mix Ratio – Parts By Weight (Part A:Part B) Parts By Volume (Part A:Part B)	55:100 1 : 2
Color: Part A Part B Mixed	Part A: Clear Part B: Milky-White Mixed: Milky White
Pot Life, 50 grams @ 65-77°F	5-7 minutes
Shelf Life	A: 6 months B: 6 months
Specific Gravity	Part A: 1.15 Part B: 1.04
Viscosity @ 77°F	Part A: <4000 Part B: <2000 Mix: <2000

**Technical Data Sheet (Continued)**  
**RF 1350M4 A/B**

**Physical Properties**

Property	RF 1350M4 A/B
Hardness, Shore A	60-65
Tensile Strength:	1500-2500
100 % Modulus, psi	300
200 % Modulus, psi	500
Ultimate Elongation, %	250-350
Tear Strength (graves), pli	> 100
Shelf Life	A: 6 months    B: 6 months
Linear Shrinkage, 176°F (80°C)	1.00%
Room Temperature	Undetectable
Demold Time, 176°F (80°C)	1 hour
Room Temperature	4-6 hours

DANGER	FIRST-AID
<ul style="list-style-type: none"> <li>• May cause severe irritation.</li> <li>• Do not get in eyes, on skin or clothing.</li> <li>• Do not inhale vapors.</li> <li>• Wear rubber gloves &amp; aprons.</li> <li>• Use with adequate ventilation.</li> <li>• Wash thoroughly after handling.</li> </ul>	<ul style="list-style-type: none"> <li>• <u>Eyes</u> - Immediately flush eyes with plenty of water for at least 15 minutes. <i>Get medical attention.</i></li> <li>• <u>Skin</u> - Wash immediately with soap and water.</li> <li>• <u>Clothing</u> - Remove clothing and wash before reuse.</li> </ul>
<p><b><u>For Industrial Use ONLY    Keep container closed    Do Not Reuse this Container</u></b></p>	

**SAFETY INFORMATION: PROTECT THE EYES FROM EXPOSURE TO THIS PRODUCT.** RF 1350M4 Part A contains a low vapor pressure isocyanate. Proper ventilation and safety equipment to ensure no contamination of the eyes or skin must be enforced. If skin contact does occur, the affected area should be washed with soap and water as soon as possible. **Read and understand the safety data sheets supplied with this product before using.**

**In case of eye contact, flush with plenty of water for 15 minutes. Get medical attention. Keep the material off the skin. In case of skin contamination, wash with a mild soap and water. Do not use solvents to remove adhesive from the skin. Wash before using the rest room, eating, or smoking. Read and follow the instructions in the material safety data sheet supplied with this material.**

**Technical Data Sheet (Continued)**  
**RF 1350M4 A/B**

**Notice to Buyer: Exclusion of Warranties and Limitation of Liability**

All information supplied by Resin Formulators Company and E.V. Roberts is considered accurate, but is furnished upon the express condition that the person receiving it shall make their own tests to determine its suitability for their particular purpose. NO WARRANTY IS EXPRESSED OR IMPLIED REGARDING SUCH INFORMATION, THE DATA UPON WHICH THE SAME IS BASED, OR THE RESULTS TO BE OBTAINED FROM THE USE OF SUCH INFORMATION OR PRODUCT WILL NOT INFRINGE ANY PATENT. UNDER NO CIRCUMSTANCES SHALL RESIN FORMULATORS COMPANY AND E.V. ROBERTS & ASSOCIATES, INC. BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OR HANDLING OF ITS PRODUCTS, AND, IN ANY EVENT, LIABILITY FOR BREACH OF ANY WARRANTY OR CONTRACT WITH RESPECT TO SUCH PRODUCTS IS LIMITED TO THE NET SELLING PRICE OF THE PRODUCT OR THE REPLACEMENT THEREOF AT THE OPTION OF RESIN FORMULATORS COMPANY AND E.V. ROBERTS. The stylized E.V. Roberts logo is a registered trademark of E.V.Roberts.

**Original: KZ 02-27-04**

**Revision: KZ 03-09-05**