



ISO-9001-2008 Certified



Authorized Distributor
1-800-375-0605
www.rudolphbros.com

TECHNICAL BULLETIN

UXP-052107-1 URETHANE POTTING COMPOUND

UXP-052107-1 is a filled, two-part urethane resin system, which combines good handling characteristics with excellent cured properties. Its low viscosity allows good flowability and air release.

The cured elastomer has excellent water resistance and is exceptionally resistant to thermal shock. It is useful for general purpose casting, potting or encapsulating intricate circuits, operational amplifiers, transformers, and other electric/electronic components.

TYPICAL HANDLING PROPERTIES:

Mix ratio by weight (A/B)	15/100
Density @ 25°C, cps	
PART-A	1.22
PART-B	1.60
Mixed	1.57
Viscosity @ 25°C, cps	
PART-A	65-85
PART-B	15,000-30,000
Mixed	4000-8000
Gel Time at 25°C (115 gram), minutes	8-12

Recommended cure schedules:

OR
8-24 hrs @ 25°C
30 min @ 65°C

TYPICAL CURED PROPERTIES:

(Tested @ 25°C unless otherwise indicated)

Color	Black
Specific Gravity	1.56
Hardness, Shore A	88
Water Absorption (24 hr at RT), %	0.15
Weight Loss @ 120°C (7 days), %	0.2
Service temperature range, °C	-55 to 110
Dielectric Strength, Volts/mil (0.125 inch)	420
Dielectric Constant at 1 kHz	4.2
Dissipation Factor at 1 kHz	0.02
Volume Resistivity, ohm-cm	2x10 ¹⁴

INSTRUCTIONS FOR USE:

1. Mix contents thoroughly each time before removing material.
2. To each 15 grams of Part A, add 100 grams of Part B and mix it well preferably using a mechanical mixer.
3. Vacuum degas to remove any dissolved or entrapped air.
4. Proceed with the casting or potting application and cure as recommended.

FOR INDUSTRIAL USE ONLY:

These materials are intended for industrial use only, and the practices of good housekeeping, safety and cleanliness should be followed before, during and after use.

WARNING!

Although the system contains low volatility materials, care should be taken in handling. Adequate ventilation of work place and ovens is essential. These materials may cause injury to the skin following prolonged or repeated contact and dermatitis in susceptible individuals. In case of skin contact, wash thoroughly with soap and water. For eyes, flush immediately with plenty of water for at least 10 minutes and seek medical attention. Refer to Material Safety Data Sheet for additional health and safety information.

SHELF LIFE:

The shelf life of these materials is 12 months when stored in unopened containers at an average temperature of 25°C. If containers are opened and the contents only partially used, the container should be flushed with dry nitrogen before being resealed.

DISCLAIMER: All data given here is offered as a guide to the use of these materials and not as a guarantee of their performance. The user should evaluate their suitability for own purposes. Properties are typical and should not be used in preparing specifications. Statements are not to be construed as recommendations to infringe any patent.