

Technical Data:

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U 146-3/UC 143

Two-Component Low Viscosity PU Potting Compound

Product Description

U 146-3/UC 143 is a two-component, low viscosity unfilled PU compound for potting, casting and encapsulating. The compound displays excellent impact resistance.

Features & Benefits

- High impact resistance
- High penetration
- Suitable for manual and automatic mixing
- Semi-rigid
- Good adhesion to metals and ceramics
- High mechanical properties

Applications

Potting, casting and encapsulating

Typical Uncured Physical Properties

Note: The following technical information and data should be considered representative or typical only and should not be used for specification purposes.

Base Resins	U 146-3 (A) UC 143 (B)	Polyol mixture Isocyanate
Appearance/Color	A B	Transparent Light yellow
Viscosity @ 25°C, mPa*s per ASTM-D-2393	A B	900-1200 10-60
Density @ 25°C, g/cm³	A B	1.04 ± 0.02 1.22 ± 0.02
Mix Ratio A:B (w/w)	100:60	
Mix Viscosity @ 25°C, mPa*s per ASTM-D-2393	200-500	
Pot life @ 25°C, (100g), min	10-15	
Gel-time @ 25°C, (100g), min	15-20	
Curing time @ 25°C, hr	4-6	

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Instructions for use:

To produce pore free casting the component U 146-3 should be heated at 50-60°C for 2-3 hours, cooled down to RT and degased at 2-5 mmHg for 10-15 minutes to remove trapped air. It is recommended to degas the component UC 143 at the same conditions.

Weigh required amount of the components in the recommended ratio.
Blend them thoroughly to ensure uniform mixture.
Degas the mixture for-2-3 min to remove trapped air.
Pour into the mold.

Typical Cured Properties

Note: The following technical information and data should be considered representative or typical only and should not be used for specification purposes.

Color	Off-White
Final properties @ 25°C, days	>7
Hardness, ASTM –D-2240, Shore D	65-70
Yield Strength, ASTM-D-638, MPa	14-15
Elongation at yield, ASTM-D-638, MPa %	6.0-7.5
Ultimate Tensile Strength, ASTM-D-638, MPa	18-20
Elongation at break, ASTM-D-638, %	55-70
Service Temperature, °C	-40 to 90

Storage

Store products at 15-30°C for maximum shelf life.

Packaging

Packaging sizes are available from 1L up to 5L jerricans.

Shelf Life

Product U 146-3 has a shelf- life of 12 months, while product UC 143 has a shelf- life of 3 months in their unopened original containers.

Limitation of Liability

Except where prohibited by law, Polymer-G and seller will not be liable for any loss or damage arising from the Polymer-G product, whether direct, indirect, special, incidental or consequential, regardless of the legal theory asserted, including warranty, contract, negligence or strict liability.