

PuCast 261

Polyurethane casting resin

Product description

PuCast 261 is an unfilled, two-component polyurethane casting resin. Different fillers can be added during mixing to obtain the required properties. Its long working time permits large castings, such as sheet-metal forming tools.

Key features

- Low resin viscosity and good flow • Can be filled
- Excellent toughness and impact resistance • Excellent compressive strength of castings
- Thick tooling sections can be cast with added filler

Physical properties

Property	PuCast261A Polyol	PuCast261B Isocyanate	After mixing
Mix ratio by weight	100	100	-
Appearance	Liquid	Liquid	Liquid
Color	Beige	Pale yellow	Beige
Viscosity at 25°C (mPa.s)	Approx. 2200	Approx. 150	Approx. 850
Density at 25°C (g/cm3)	Approx. 1.06	Approx. 1.22	Approx. 1.16
Working time (500g) at 20°C (minutes)	-	-	Approx. 50
Cure time at 25°C (hours)	-	-	16-24

Mechanical properties				
			Unfilled	A:B:filler 1:1:4
Mixed density		g/cm3	Approx. 1.16	Approx. 2.14
Hardness	ISO868:1985	Shore hardness	Approx. 80D	Approx. 87D
Flexural modulus	ISO178:2001	MPa	Approx. 2200	Approx. 5000
Flexural strength	ISO178:2001	MPa	Approx. 65	Approx. 70
Compressive strength	ISO604:1997	MPa	Approx. 70	Approx. 120
Charpy impact strength	ISO179/2D:1994	kJ/m2	Approx. 66	Approx. 5

2026-4 PuCast261 Polyurethane casting resin | Source page 1/2

Other properties			Filled
Heat deflection temperature 1)	ISO75	°C	/
Maximum casting thickness	-	mm	400
Linear shrinkage	-	%	0.1

1) The values above are averages measured on standard specimens / Cure conditions: 80°C /6 hours

Processing instructions

- Thoroughly stir the polyol component before use
- Mix the polyol and isocyanate components thoroughly in the specified ratio
- Continue stirring after adding filler
- Leave to stand for 3-5 minutes, then pour the resin into the mold
- Demold after 16-24 hours at room temperature

Packaging

PuCast261 Polyol	PuCast261 Isocyanate
20kg	20kg

Storage

The polyol and isocyanate have a shelf life of 12 months when stored dry in unopened containers at 15°C-25°C.

Promptly reseal opened containers in a dry environment. After using the hardener, blanket the container with nitrogen or dry air and close the lid tightly to prevent moisture-induced discoloration. Use any remaining material as soon as possible.

Safety precautions

Avoid skin contact during application. Wear protective clothing, a mask and protective gloves as necessary, and work in a well-ventilated area. Refer to the material safety data sheet for further information.

Notes

All data above were measured under specified conditions. As actual processing methods and other factors may affect performance, customers should conduct the necessary tests before use to confirm suitability for their application. We guarantee that our products meet our quality specifications.

2026-4 PuCast261 Polyurethane casting resin | Source page 2/2

US customary-unit equivalents

US customary-unit equivalents are provided for convenience alongside the original SI test data. The original source values and test methods remain the controlling reference. Converted values are rounded.

Source value	US equivalent
25 °C	77 °F
500 g	1.102 lb
20 °C	68 °F
400 mm	15.7 in (1.312 ft)
80 °C	176 °F
20 kg	44.1 lb
15 °C	59 °F
-25 °C	-13 °F