

Product information

Polyurethanes



PU 9004

FEATURES

- Dimensional stability
- Thermal stability
- Fast demoulding

COMPOSITION

- Polyol PU9004 A
- Isocyanate PU9004 B



PU 9004 is a rigid, compact, two-component polyurethane system designed by injection after mechanical mixing. Stable at temperature and deformation, pigmentable. Suitable for use with glass fibers.

APPLICATIONS

- Designed technical items, with or without reinforcing fibers.

TYPICAL PROPERTIES

This data does not constitute the Product Sales Specifications. The values indicated refer to typical properties and are not to be understood as extreme minimum or maximum values. They do not constitute a guarantee of product conformity and do not relieve the buyer from the need to test the suitability of the products before use or placing them in his production cycle. Please contact your local sales representative to obtain the product specifications.

Property	Unit	Value
Color (Part A/Part B)	Visual	Cream / Brown
Density at 23°C (Part A/Part B)	g/cm ³	1.05 / 1.22
Viscosity at 23°C (Part A/Part B)	mPa.s	1720 / 350
Mix ratio A : B	pbw	100 : 100
Pot Life [150g at 23°C]	mins/secs	00' : 20''
Gel time [150g at 23°C]	mins/secs	00' : 35''
Hardness	Shore D	80
Tensile strength	MPa	57
Elongation at break	%	12
Flexural modulus	MPa	2230
Flexural strength	MPa	88
Linear shrinkage [500x50x10mm]	%	1.12
Tg [7 days at 23°C]	°C	81
Tg max	°C	95

RESIN SETTING

Mechanically mix Part A (Polyol) at low speed before each withdrawal from the container. The two components must be processed at a temperature between +20°C and +30°C. High temperatures increase the reaction rate, reducing the workability time.

MIXING

Use specific mixing and dosing systems for two-component polyurethanes, checking the flow rate and ISO / POL ratio. The higher the temperature of the environment, of

the components, of the mold, the shorter the workability time. For coloring we recommend the use of specific pigment pastes for polyurethanes to be added in Part A (polyol) in quantities not exceeding 5%. This resin is aromatic and is therefore subject to yellowing.

CURING

The product can generally be processed within the times indicated above. The curing time depends on the mass: thinner thicknesses require longer curing times. High product and environmental temperatures lead to reductions in workability and curing times.

Contrariwise, low temperatures mean longer times. A post-curing treatment in oven is recommended to stabilize the polymer at high temperatures and accelerate crosslinking.

HANDLING PRECAUTIONS

The information for a correct and safe handling of the products is contained in the safety data sheet. Consult the safety data sheets before use for complete information on the risks to health and the environment and for the suitable protective devices to be adopted. Share the safety data sheets with all staff involved in the use of the products.

USABLE LIFE - STORAGE

Polyol and isocyanate must be stored in the original unopened containers at a temperature between +10°C and +35°C. Isocyanates can crystallize at low temperatures. Bring the components to 20-25°C before use. The two components are sensitive to humidity: the absorption of water creates expansion during the reaction phase. The addition of zeolites in the polyol restores the functionality of the product. Be sure to close containers tightly after use. Polyol and isocyanate, if stored under the specified conditions, have a shelf life of 3 months from the date of manufacture.

PACKAGING

The components are supplied in 200 liters drums or 1000 liters tanks. For

other packaging please contact our sales department.

LIMITATIONS

This product is neither tested nor represented as suitable for food contact, skin contact or medical uses.

LIMITED WARRANTY

The information contained in this document is offered in good faith based on Chemix research and is believed to be accurate. However, as the conditions and methods of use of our products are beyond our control, this information should not be used as a substitute for the tests that customers must first perform to ensure that Chemix products are fully satisfactory for their specific applications. The warranty is only applicable to the values indicated in the Product Sales Specifications. The sole and exclusive compensation for products with values that are out of specification is limited to the replacement of the product or the refund of the purchase price.

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