

Product information

Fast-cast

PU 8070

FEATURES

- Excellent definition
- Low viscosity
- Easily pigmentable
- Odorless

COMPOSITION

- Polyol PU8070 A
- Isocyanate PU8070 B



PU 8070-1 is a two-component polyurethane system, odorless, low viscosity, to which it is possible to add specific charges in variable ratios depending on the application and the required casting thicknesses. Designed for manual mixing and casting.

APPLICATIONS

- Precise model reproduction.

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/Yellowish
Density at 23°C (Part A/Part B)	g/cm ³	0.98 / 1.12
Viscosity at 23°C (Part A/Part B)	mPa.s	80-90 / 40-50
Mix ratio A : B	pbw	100 : 100
Pot Life [150g at 23°C]	mins/secs	04':45''
Gel time [150g at 23°C]	mins/secs	05' : 00''
Demoulding 5mm at 23°C	Minutes	30 – 40
Hardness	Shore D	75
Tensile strength	MPa	28
Elongation at break	%	8 – 10
Flexural modulus	MPa	1100 – 1200
Flexural strength	MPa	42
Linear shrinkage [500x50x10mm]	%	0.22
Tg [7 days at 23°C]	°C	58
Tg [post-cured 4hrs at 80°C]	°C	112

MOLD SETTING

Make sure the mold is clean and dry, free of moisture. Treat the surface with a suitable waxy release agent. If necessary, preheat the mold to 40-50°C to reduce the demoulding time. RTV-2 silicone rubber molds allow a limited number of reproductions.

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 & CASTING

Mix the two components in the correct ratio, at low speed, avoiding air inclusion and make sure that the material on the sides and bottom of the container is well mixed. To obtain items free from air bubbles, degass under vacuum after mixing or, in case of complex shapes, after casting into the mold. Carefully pour into a point of the mold in order to avoid air inclusion. The addition of fillers decreases dimensional shrinkage and lowers the heat developed by the reaction, allowing for greater masses and thicknesses. The exact amount of filler depends on the particle size of the filler itself and the desired viscosity. Use selected fillers with low moisture content. The greater the amount of material, the shorter the workability time. 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 6 months from the date of manufacture.

PACKAGING

The components are supplied in 5 liter cans. 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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