



BUILDING TRUST



# F180 ISOCYANATE F180-1 POLYOL

FASTCAST POLYURETHANE  
CAN BE FILLED  
IMPACT RESISTANCE - LOW SHRINKAGE

## APPLICATIONS

Negatives, molds, masters, mock-ups and decorative parts using the unfilled product or filled with RZ 30150 mineral filler in order to avoid an exothermic reaction and to get easy machining.

Thermoforming masters using the product filled with RZ 209/6 aluminium powder in order to increase thermal conductivity.

## PROPERTIES

- Quick setting system
- Low viscosity
- Impact resistant
- Low shrinkage
- Adequate viscosity even with high rate filler
- REACH and ROHS compliant

### PHYSICAL PROPERTIES

Composition		POLYOL	ISOCYANATE	UNFILLED MIXING	MIXING FILLED RZ 30150
Mixing ratio by weight		100	100	-	360
Aspect		Liquid	Liquid	Liquid	Liquid
Color		Off-white	Translucent yellow	Off-white	Beige
Viscosity at 25°C (mPa.s)	BROOKFIELD LVT	57	110	80	1700
Density of liquid parts (g/cm <sup>3</sup> )	ISO 1675	0.97	1.1	-	1.67
Density of cured mixing at 23°C	ISO 2781	-	-	1.08	
Pot life at 25°C on 200g (min)	Gel Timer TECAM			3'25	5'10

### MECHANICAL PROPERTIES AT 23°C (1)

Hardness	ISO 868	Shore D1	70
Flexural modulus	ISO 178	MPa	1100
Flexural strength	ISO 178	MPa	38
Charpy impact resistance <i>Unnotched test samples</i>	ISO 179/1eU	kJ/m <sup>2</sup>	18

### THERMAL AND SPECIFIC PROPERTIES

Glass transition temperature (Tg) (1)	ISO 11359-2	°C	97
Demolding time at 25°C : thickness 10 mm	Internal method	min	45
Linear shrinkage on 1000x50x10 sample at 23°C	Internal method	mm/m	3

(1): Average values obtained on standardized specimens / Hardening 16 hours at 70°C

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# F180 ISOCYANATE

## F180-1 POLYOL

### FASTCAST POLYURETHANE

#### CAN BE FILLED

IMPACT RESISTANCE - LOW SHRINKAGE

## PROCESSING CONDITIONS

Before use, the polyol must be mixed until both color and aspect become homogeneous. The polyol and the Isocyanate must be mixed at a temperature equal or above 18°C according to the mix ratio indicated on this technical data sheet.

For casting thicknesses above 10 mm, it is recommended to add filler as follows:

- up to 360 phr of RZ 30150 filler (mineral filler)
- up to 360 phr of RZ 209/6 filler (aluminium powder)

We advise to add half of the total quantity of fillers in each of the two parts. Mix and homogenize them separately prior to mix these two pre-filled parts together.

## HANDLING PRECAUTIONS

Normal health and safety precautions should be observed when handling these products:

- Ensure good ventilation,
- Wear gloves and safety glasses and clothes.

For further information, please consult the product safety data sheet.

## STORAGE CONDITIONS

Shelf life of both parts is 12 months, in a dry place and in their original unopened containers at a temperature between 15 to 25°C. Any open must be tightly closed under dry inert gas (dry air, nitrogen, etc.).

## PACKAGING

F180-1 POLYOL	F180 ISOCYANATE	KIT
6 x 0.9 Kg 1 x 4.5 kg 1 x 18 Kg	6 x 0.9 Kg 1 x 4.5 Kg 1 x 18 Kg	6 x (0.9+0.9) Kg 1 x (4.5+4.5) Kg 1 x (18+18) Kg

## GUARANTEE

Information of our technical data sheet is based on our present knowledge and the result of tests conducted under precise conditions. It is the responsibility of the user to determine the suitability of AXSON products for his application under his own conditions. AXSON refuses any guarantee about the compatibility of a product with any particular application. AXSON disclaims all responsibility for damage from any incident which results from the use of these products. The guarantee conditions are regulated by our general sale conditions.

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