

APPLICATIONS

Used by direct casting with addition of a mineral filler (RZ 30150) for producing negatives, molds, masters and mock-ups. When using as a thermoset master use the RZ 209/8 filler (aluminium powder) to improve the thermal ductility.

PROPERTIES

- Very quick demolding
- Good temperature resistance after curing
- Mix ratio: 1/1
- Low viscosity
- Variable filler rate

PHYSICAL PROPERTIES - F 16 NON RE-FILLED

		PART A	PART B	MIXING
Composition		POLYOL	ISOCYANATE	
Mixing ratio by weight		100	100	
Aspect		liquid	liquid	liquid
Color		off-white	dark amber	beige
Brookfield LVT viscosity @ 25°C (mPa.s)	-	120	40	80
Specific gravity @ 25°C Specific gravity of the cured product @ 23°C	ISO 1675-75 ISO 2781-88	1.00 -	1.10 -	- 1.05
Pot life @ 25°C on 200 g (min.)	-			2'10" - 2'30"

PHYSICAL PROPERTIES F 16 REFILLED WITH RZ 30150

		F 16	RZ 30150	MIXING
Composition		POLYURETHANE	MINERAL FILLER	
Mixng ratio by weight		100 A + 100 B	300	
Aspect		liquid	solid	thick liquid
Color		beige	off-white	beige
Brookfield LVT viscosity @ 25°C (mPa.s)	-	80	-	1,500
Specific gravity of the cured product @ 23°C	ISO 2781-88	1.05	-	1.61
Demolding time @ 25°C Thickness: 10 mm Thickness: 40 mm (min)	-	30		20

PROCESSING CONDITIONS

Before any use the part A (polyol) must be thoroughly mixed. The both parts (polyol and isocyanate) must be mixed at a temperature above 18°C according to the ratio indicated on the technical data sheet. For casting thickness above 5 mm it is recommended to add a filler as follows:

- 300 Pph of RZ 3017/0 filler to limit exothermy
- 400 Pph of RZ 209/8 filler (aluminium powder) to increase thermal ductility.



MECHANICAL PROPERTIES @ 23°C (1)				
F 16 filled with RZ 30150		phr	0	300
Hardness	ISO 868-85	Shore D1	72	82
Flexural modulus of elasticity (E _f)	ISO 178-93	MPa	1,000	3,600
Flexural strength	ISO 178-93	MPa	37	39
Compressive yield strength	ISO 604-97	MPa	33	60
Charpy shock resistance	ISO 1791/D	kJ/m ²	13	-

THERMAL & SPECIFIC PROPERTIES (1)				
F 16 filled with RZ 30150		phr	0	300
Glass transition temperature	T.M.A.-Mettler	°C	100	
Linear shrinkage (Test specimen: 250x60x50)		% ₀	-	3.7
Coefficient of linear expansion (C _L TE) [+20, +90]°C	T.M.A.-Mettler	mm/mm°C	-	84

(1) : Average values obtained on standardized specimens / Hardening 14 hours @ 60°C

(2) : phr = Per Hundred of Resin, i.e. a weight expressed for 100 g polyol (part A).

STORAGE - PRESERVATION

Shelf life of every component is 6 months in a dry place and in original unopened containers at a temperature between 15 to 25°C.

The isocyanate is UV sensitive. It must be kept in its original container protected from the light.

Packagings must be tightly closed under dry inert gas (dry air, nitrogen, etc.).

PRECAUTIONS

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

- ensure good ventilation
- wear gloves and safety glasses

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

PACKAGING

Part A
 6 x 0.9 kg
 1 x 5.0 kg
 1 x 20.0 kg

Part B
 6 x 0.9 kg
 1 x 5.0 kg
 1 x 20.0 kg

GUARANTEE

The information of our technical data sheet are 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, under their own conditions before commencing with the proposed application. AXSON refuse any guarantee about the compatibility of a product with any particular application. AXSON disclaim 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.