

FASTCAST POLYURETHANE CAN BE FILLED GOOD IMPACT RESISTANCE - LOW SHRINKAGE

DESCRIPTION

Negatives, moulds, masters and mock-ups using the unfilled product or filled with RZ 30150 mineral filler in order to limit exotherm and to get easy machining.

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

PROPERTIES

- Good impact resistance
- Fast demoulding
- Low shrinkage
- Low viscosity

- Easy-to-use mix ratio (1:1 by weight)
- High filler content possible while retaining a low viscosity

PHYSICAL PROPERTIES						
Composition			PART A POLYOL	PART B ISOCYANATE	UNFILLED MIXING	MIXING FILLED WITH RZ 30150
Mix ratio by weight			100	100	-	360
Aspect			liquid	liquid	liquid	liquid
Colour			off-white	light amber	beige	beige
Viscosity at 25°C	(mPa.s)	BROOKFIELD LVT	55	60	60	2,700
Specific gravity at 25°C Specific gravity of cured p	(g/cm ³) roduct at 23°C	ISO 1675 : 1985 ISO 2781 : 1996	0.94	1.20 -	- 1.08	- 1.67
Pot life at 25°C on 200 g	(min)	Gel Timer TECAM			3'20 - 3'40	-

MECHANICAL PROPERTIES at 23°C (1)						
			UNFILLED MIXING	MIXING FILLED WITH 360 phr RZ 30150		
Hardness	ISO 868 : 2003	Shore D1	70	82		
Flexural modulus	ISO 178 : 2001	MPa	1,100	3,900		
Flexural strength	ISO 178 : 2001	MPa	42	46		
Compressive strength at yield	ISO 604 : 2002	MPa	38	54		
Impact strength (CHARPY) Unnotched specimens	ISO 179/1eU : 1994	kJ/m ²	25	-		

^{(1):} Average values obtained on standard specimens / Hardening 14 hr at 60°C

HANDLING PRECAUTIONS

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

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

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

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THERMAL AND SPECIFIC PROPERTIES (1)					
			UNFILLED MIXING	MIXING FILLED WITH 360 phr RZ 30150	
Glass transition temperature (Tg)	ISO 11359 : 2002	°C	80		
Coefficient of thermal expansion (CTE) (+20°C to +70°C)	ISO 11359 : 1999	10 ⁻⁶ K ⁻¹	-	76	
Linear shrinkage (thickness 50 mm)	-	mm/m	-	0.23	
Demoulding time at 25°C - thickness: 10 mm - thickness: 40 mm			45 -	- 30	

PROCESSING CONDITIONS

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

- up to 360 phr of RZ 30150 filler (mineral filler) up to 400 phr of RZ 209/6 filler (aluminium powder)

up to thickness no more than 40 mm

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 and 25°C.

Any open can must be tightly closed under dry nitrogen.

PACKAGING

POLYOL (Part A)	ISOCYANATE (Part B)
1 x 4,5 kg	1 x 4,5 kg
6 x 0,9 kg	6 x 0,9 kg
1 x 18,0 kg	1 x 18,0 kg
1 x 50,0 kg	1 x 50,0 kg

GUARANTEE

The information contained in this technical data sheet result from research and tests conducted in our Laboratories 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 guarantee the conformity of their products with their specifications but cannot guarantee 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 responsibility of AXSON is strictly limited to reimbursement or replacement of products which do not comply with the published specifications.