

Sovermol® 760

general

Sovermol® 760 is a polyol used in the manufacturing of UV-stable polyurethanes.

- Hydrolysis stable
- Hydrophobic
- Extremely high T_g-polyol
- High Shore D hardness (D~90)
- High renewable raw material content
- High saponification stable
- Excellent chemical resistance

Sovermol® 760 shouldn't be stored at temperatures below 15°C because it may crystallize partially. This effect is reversible by warming up to approx. 50°C.

chemical nature

Branched polyether/polyester

Properties

physical form

Medium viscous, yellow, liquid

shelf life

When stored under the usual appropriate storage conditions, the product can be stored for at least 1 year.

typical properties (no supply specification)

Water content (DGF C-III 13A)	< 0.2%
Acid number (DGF C-V 2)	< 2.0
Hydroxyl number (DIN 53240-98)	370 – 410 mg KOH/g
Viscosity (dynamic) (25 °C) (DIN 53015)	1500 - 3000 mPa·s
Density (20 °C) (DGF C-IV 2B (52))	1.00 - 1.04 g/cm ³

Application

In combination with Polymer MDI Sovermol® 760 can be used for the production of 2 pack coating and casting materials. In combination with an aliphatic, HDI-based polyisocyanate, Sovermol 760 is suitable for the production of UV-stable and weathering resistant coatings.

In addition, Sovermol® 760 is strongly water repellent, which results in less sensitivity to moisture while curing.

Mixing Formulation (without filler)

100 g Sovermol®
5 g Zeolith paste
94 g Polymer MDI*

*e.g. Lupranate M 20 S – BASF Polyurethanes

Gel time at 23°C approx. 19 min (30g mass).

Shore hardness (storage/room temperature)

	A	D
after 1 day	100	86
after 2 days	100	88
after 3 days	-	-
after 7 days	-	-
after 14 days	100	90
after 28 days	100	90

Technical Data

Sovermol® 760 in combination with

	Polymer MDI*	MDI (Carbodiimid- modified)**	Aliphatic polyisocyanate Basis HDI***
Shore A/D hardness RT (ISO 868)			
after 1 day	100/86	-/86	-/37
after 2 days	100/88	-/87	-/-
after 3 days	-	-/-	-/-
after 7 days	-	-/-	-/-
after 14 days	100/90	-/90	-/-
after 28 days	100/90	-/90	-/82
Mixing ratio	100:94	100:108	100:127
Geltime in hours Coesfield	00:19	00:17	01:32 +0,1g Fomrez UL 28 (10%**** for 100g Polyol
Tensile strength in MPa (ISO 527-3 Typ5)	42	30	26
Elongation in % (ISO 527-3 Typ5)	1	2	39
Tear resistance in N/mm (ISO 34-1)	6	14	20
Bending strength in MPa (DIN EN ISO 178)	57	29	22
Impact resistance in mJ/mm² (DIN 53453)	4	7	-
Glass transition temperature DMA method storage of test pieces 2 days @ 80°C	136°C	119°C	-

* e.g. Lupranat M 20 S, BASF Polyurethanes

** e.g. Supraspec 2010, Fa. Huntsman Polyurethanes

*** e.g. Basonat LR 9046, BASF SE

**** Momentive Performance Materials Inc.

Registration / Regulatory Information

Regulatory Status

AICS (Australia)	<input checked="" type="radio"/>	
ENCS (JP)	<input checked="" type="radio"/>	
EU (EU)	<input checked="" type="radio"/>	
TSCA (USA)	<input checked="" type="radio"/>	
DSL/NDSL (Canada)	<input type="radio"/>	
PICCS (Philippines)	<input type="radio"/>	
IECSC (China)	<input checked="" type="radio"/>	
KECL/ECL (Korea)	<input checked="" type="radio"/>	
	<input checked="" type="radio"/>	Yes
	<input type="radio"/>	No

Safety

When handling these products, please comply with the advice and information given in the safety data sheet and observe protective and workplace hygiene measures adequate for handling chemicals.

Note

The data contained in this publication are based on our current knowledge and experience. In view of the many factors that may affect processing and application of our product, these data do not relieve processors from carrying out their own investigations and tests; neither do these data imply any guarantee of certain properties, nor the suitability of the product for a specific purpose. Any descriptions, drawings, photographs, data, proportions, weights, etc. given herein may change without prior information and do not constitute the agreed contractual quality of the product. The agreed contractual quality of the product results exclusively from the statements made in the product specification. It is the responsibility of the recipient of our product to ensure that any proprietary rights and existing laws and legislation are observed.

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