

# Sovermol® 750

## general

Sovermol® 750 is a polyol used in the manufacturing of UV-stable polyurethanes.

- Hydrolysis stable
- Hydrophobic
- Low viscosity
- High Shore D hardness (D~80)
- High renewable raw material content
- High saponification stable
- Excellent chemical resistance
- High T<sub>g</sub>-polyol

Sovermol® 750 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

Low viscous, yellow, clear 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 (ISO 4317)	< 0.1%
Acid number (ISO 660)	< 2.0
Hydroxyl number (DIN 53240-98)	300 – 330 mgKOH/g
Viscosity (dynamic) (20 °C) (DIN 53015)	700 - 1400 mPa·s
Density (20 °C) (DGF C-IV 2B (52))	0.970 - 1.02 g/cm <sup>3</sup>
Color number (DIN ISO 4630)	0 - 3

## Application

In combination with Polymer MDI Sovermol® 750 can be used for the production of 2 pack coating and casting materials. In combination with an aliphatic, HDI-based polyisocyanate, Sovermol 750 is suitable for the production of UV-stable and weathering resistant coatings.

In addition, Sovermol® 750 is strongly water repellent, which results in less sensitivity to moisture while curing.

## Mixing Formulation (without filler)

100 g Sovermol®

5 g Zeolith paste

76 g Polymer MDI\*

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

Gel time at 23°C approx. 55 min (30g mass).

## Shore hardness (storage/room temperature)

A D

after 1 day

77 32

after 2 days

86 42

after 3 days

- -

after 7 days

- -

after 14 days

98 66

after 28 days

98 67

## Technical Data

### Sovermol® 750 in combination with

	Polymer MDI*	MDI (Carbodiimid- modified)**	Aliphatic polyisocyanate Basis HDI***
<b>Shore A/D hardness RT (ISO 868)</b>			
after 1 day	100/74	-/75	55/-
after 2 days	100/80	-/83	61/-
after 3 days	-	-/-	-/-
after 7 days	-	-/-	-/-
after 14 days	100/86	-/86	-/-
after 28 days	100/87	-/86	77/-
<b>Mixing ratio</b>	100:76	100:88	100:103
<b>Geltime in hours Coesfield</b>	00:38	00:54	00:14
			+2,5 g-K-Kat XC 6212**** for 100g Polyol
<b>Tensile strength in MPa (ISO 527-3 Typ5)</b>	45	40	5
<b>Elongation in % (ISO 527-3 Typ5)</b>	3	6	52
<b>Tear resistance in N/mm (ISO 34-1)</b>	9	15	13
<b>Bending strength in MPa (DIN EN ISO 178)</b>	53	-	-
<b>Impact resistance in mJ/mm<sup>2</sup> (DIN 53453)</b>	6	-	-

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

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

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

\*\*\*\* King Industries, Inc.

## Registration / Regulatory Information

### Regulatory Status

AICS (Australia)



ENCS (JP)



EU (EU)



TSCA (USA)



DSL (Canada)



PICCS (Philippines)



IECSC (China)



KECL/ECL (Korea)



Yes



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

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