

Sovermol[®] 750

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

Key benefits

- Hydrolysis stable
- Hydrophobic
- Low viscosity
- High Shore D hardness (D ~ 80)
- High renewable raw material content
- High saponification stable
- Excellent chemical resistance
- High T_g- Polyol

Chemical nature Branched polyether/polyester

Properties

Physical form Low viscous, yellow, clear liquid

Technical data

(not supply specification)

Water content	ISO 4317	< 0.1%
Acid number	ISO 660	< 2.0 mg KOH/g
Hydroxyl number	DIN 53240-98	300 – 330 mgKOH/g
Viscosity, dynamic, 20 °C	DIN 53015	700 – 1,400 mPa.s
Density, 20 °C	DGF C-IV 2B (52)	0.97 – 1.02 g/cm ³
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.

Formulation guideline (without filler)

100 g Sovermol® 750

5 g Zeolith Paste

76 g Polymer MDI*

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

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

Shore hardness

(storage/room temperature)

	A	D
after 1 day	77	32
after 2 day	86	42
after 3 day	–	–
after 7 days	–	–
after 14 days	98	66
after 28 days	98	67

Polymer MDI*

MDI
(Carbodiimid-modified) **
Sovermol® 750 in combination with:

Aliphatic
Polyisocyanate Basis HDI***

Shore A/D hardness RT (ISO 868)

	Polymer MDI*	MDI (Carbodiimid-modified) ** Sovermol® 750 in combination with:	Aliphatic Polyisocyanate Basis HDI***
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/–

Mixing ratio

100:76

100:88

100:103

Geltime in hours Coesfield

00:38

00:54

00:14
+2.5 g-K-Kat XC 6212**** for 100 g
Polyol

Tensile strength in MPa (ISO 527-3 Typ 5)

45

40

5

Elongation in % (ISO 527-3 Typ 5)

3

6

52

Tear resistance in N/mm (ISO 34-1)

9

15

13

Bending strength in MPa (DIN EN ISO 178)

53

–

–

Impact resistance in mJ/mm² (DIN 53453)

6

–

–

- * e.g. Lupranat® M 20 S, BASF Polyurethanes
- ** e.g. Supraspec® 2010, Fa. Huntsman Polyurethanes
- *** e.g. Basonat® HI 2000, BASF SE
- **** King Industries, Inc.

Storage

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.

Shelf life

When stored under the usual appropriate storage conditions, the product can be stored for at least 2 years.

Safety

When handling this product, 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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