

Sovermol[®] 760

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

Key benefits

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

Chemical nature Branched polyether/polyester

Properties

Physical form Medium viscous, yellow, liquid

Technical data

(not supply specification)

Water content	DGF C-III 13 A	< 0.2 %
Acid number	DGF C-V 2	< 2.0 mg / KOH/g
Hydroxyl number	DIN 53240-98	370 – 410 mg KOH/g
Viscosity, dynamic, 25 °C	DIN 53015	1,500 – 3,000 mPa.s
Density, 20 °C	DGF C-IV 2B (52)	1.0 – 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.

Formulation guideline

100 g Sovermol® 760

5 g Zeolith Paste

94 g Polymer MDI*

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

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

Shore hardness

(storage/room temperature)

A D

after 1 day

100 86

after 2 days

100 86

after 3 days

– –

after 7 days

– –

after 14 days

100 90

after 28 days

100 90

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
+0.1 g-Fomrez UL 28 (10%)**** for
100 g Polyol

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

42 30 26

Elongation in %
(ISO 527-3 Typ 5)

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® HI 2000, BASF SE

****Momentive Performance Materials Inc.

Storage

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.

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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