

# Sovermol<sup>®</sup> 805

**Product description** Sovermol<sup>®</sup> 805 is a polyol used in the manufacturing of polyurethanes.

**Key benefits**

- Universal polyol
- Shore D hardness ~ 70
- High renewable raw material content
- Excellent impact resistance
- Excellent chemical resistance

The product might be slightly cloudy - this does not affect the product properties in a negative way

**Chemical nature** Branched polyether/polyester

## Properties

**Physical form** Yellow to light brown, medium viscous polyol

**Technical data**

(not supply specification)

Water content	DGF C-III 13 A	< 0.2 %
Acid number	DGF C-V 2	< 3.0 mg / KOH/g
Hydroxyl number	ISO 4326	160 – 185 mg KOH/g
Viscosity, dynamic, 25 °C	ISO 2555 (MOD.)	2,800 – 4,000 mPa.s
Density, 20 °C	DGF C-IV 2B (52)	0.98 – 1.02 g/cm <sup>3</sup>

## Application

In combination with Polymer MDI Sovermol® 805 can be used to produce 2 pack coating and casting materials, crack bridging coatings, in floorings and for adhesives.

In addition, Sovermol® 805 shows particular water repellent, which results in less sensitivity to moisture while curing.

### Formulation guideline (without filler)

100 g Sovermol® 805
5 g Zeolith Paste
42 g Polymer MDI*

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

Gel time at 23 °C, approx. 47 min. (30 g mass)

### Shore hardness

(storage/room temperature)

	A	D
after 1 day	75	30
after 2 days	86	42
after 3 days	–	–
after 7 days	–	–
after 14 days	98	64
after 28 days	98	69

### Sovermol® 805 in combination with:

Polymer MDI*	MDI (Carbodiimid-modified) **
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### Shore D hardness RT (ISO 868)

after 1 day	30	52
after 2 days	42	61
after 3 days	-/-	64
after 7 days		68
after 14 days	64	71
after 28 days	69	72

### Mixing ratio

100:42	100:47
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### Geltime in hours Coesfield

00:47	00:39
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### Tensile strength in MPa (ISO 527-3 Typ 5)

17	16
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### Elongation in % (ISO 527-3 Typ 5)

65	81
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### Tear resistance in N/mm (ISO 34-1)

88	95
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<b>Bending strength in MPa (DIN EN ISO 178)</b>	8	–
<b>Impact resistance in mJ/mm<sup>2</sup> (DIN 53453)</b>	121	165

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

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

#### Sovermol® 805 in combination with:

##### Aliphatic Polyisocyanate

HDI-based NCO = 23 % \*/\*\*

<b>Mixing ratio</b>	100:56
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<b>Shore D hardness after 2 days storage at 80 °C (ISO 868)</b>	33
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<b>Tensile strength in MPa (ISO 527-3 Typ 5)</b>	5
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<b>Elongation in % (ISO 527-3 Typ 5)</b>	55
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<b>Tear resistance in N/mm (ISO 34-1)</b>	12
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<b>Abrasion 120 µm in mg after 1000 rpm – CS 17 (Taber Abraser)</b>	21
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<b>Abrasion 1 mm in mg after 1000 rpm – CS 17 (Taber Abraser)</b>	15
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\* e.g. Basonat® HI 2000, BASF SE

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

#### 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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BASF SE

Resins & Additives Europe

67056 Ludwigshafen, Germany

[www.basf.com/resins](http://www.basf.com/resins)