

# Sovermol® 815

**Product description** Sovermol® 815 is a polyol used in the manufacturing of polyurethanes.

**Key benefits**

- Low viscosity universal polyol
- Good elastic memory effect
- High renewable raw material content
- Binder for pigment pastes
- Good chemical resistance

Sovermol® 815 shows tendency to crystallization at temperature below 15 °C. This effect is reversible if the product is stored at a temperature over 40 °C.

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 fluid

**Technical data**

(not supply specification)

Water content	DGF C-III 13A	< 0.2%
Acid number	DGF C-V 2	< 3.0 mg KOH/g
Hydroxyl number	DGF CV 17A, B	210 – 230 mg KOH/g
Viscosity, dynamic, 25 °C	DIN 53015-78	1,300 – 1,900 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® 815 can be used to produce rigid-flexible 2 pack coating and casting materials.

In addition, Sovermol® 815 shows particular water repellency, which results in less sensitivity to moisture while curing.

### Formulation guideline

100 g Sovermol® 815

### Casting (without filler)

5 g Zeolith Paste

53 g Polymer MDI\*

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

Gel time at 23 °C, approx. 60 min. (30g mass)

### Shore hardness (ISO 868) (storage/room temperature)

A D

after 1 day

83 39

after 2 day

92 52

after 3 day

– –

after 7 days

– –

after 14 days

99 75

after 28 days

99 77

### Sovermol® 815 in combination with:

#### Polymer MDI\*

#### MDI (Carbodiimid-modified)\*\*

### Shore D hardness RT (ISO 868)

after 1 day

39 35

after 2 days

52 55

after 3 days

– 60

after 7 days

– 64

after 14 days

75 71

after 28 days

77 73

### Mixing ratio

100:53 100:60

### Geltime in hours Coesfield

01:00 00:34

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

21 16

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

34 78

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

70 78

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

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

**Sovermol® 815 in combination with:****Aliphatic Polyisocyanat HDI-based NCO = 23 %\***

<b>Fomrez UL 28 (10 %)</b>	<b>8</b>
<b>Mixing ratio</b>	100:72
<b>Geltime in hours Goesfield</b>	01:50 h
<b>Tensile strength in MPa (ISO 527-3 Typ5)</b>	5
<b>Elongation (ISO 527-3 Typ5)</b>	63 %
<b>Tear resistance (ISO 34-1)</b>	10 N/mm
<b>Abrasion 120 µm in mg after 1000 rpm – CS 17 (Taber Abraser)</b>	24
<b>Abrasion 1 mm in mg after 1000 rpm – CS 17 (Taber Abraser)</b>	22

\*e.g. Basonat® HI 2000, BASF SE

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## Storage

**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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