

Sovermol® 818

Product description

Sovermol® 818 is a polyol used in the manufacturing of polyurethanes.

Key benefits

- Low viscosity universal polyol
- Good self-leveling properties
- Extremely hydrophobic
- Good bonding properties
- Excellent flexibility at temperatures below 0 °C
- High renewable raw material content

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

Chemical nature

Oleochemical polyester

Properties

Physical form

Yellow, low viscosity fluid

Technical data

(not supply specification)

Water content	ISO 4317	< 0.2 %
Acid number	ISO 660	< 3.0 mg KOH/g
Hydroxyl number	ISO 4326	223 – 248 mg KOH/g
Viscosity, dynamic, 25 °C	ISO 12058-1 (97)	650 – 850 mPa.s
Density, 25 °C	ISO 2811-3	0.98 - 1.02 g/cm ³

Application

In combination with Polymer MDI Sovermol® 818 can be used to produce 2-pack coating and casting materials. Due to the hydrophobic properties and its low viscosity, this material is therefore eminently suitable for electro potting compounds.

In addition, Sovermol® 818 is strongly water repellent, which results in less sensitivity to moisture while curing.

Formulation guideline

1	(with	out	fill	er)
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100 g Sovermol® 818

5 g Zeolith Paste

57 g Polymer MDI*

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

Gel time at 23 °C, approx. 84 min. (30 g mass)

Shore hardness (ISO 868)

(storage/room temperature

after 1 day	60	18
after 2 days	78	31
after 3 days	-	-

 after 7 days

 after 14 days
 94
 50

 after 28 days
 96
 60

Sovermol® 818 in combination with:

Polymer MDI*

Shore	D	hardness	RT
(ISO 8	68)	

after 1 day	18
ofter 2 days	21

arter	2	aays	3
aftor	3	dave	

after 7 days	-
after 14 days	50

_	
after 28 days	60

Mixing	ratio	
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Geltime in hours	
Coesfield	

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

(ISO 527-3 Typ 5)	
Elongation in %	

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

(ISO 527-3 Typ 5)

Bending strength in MPa (DIN EN ISO 178)

100:57

01:24

18

58

64

6

Impact resistance in mJ/mm² (DIN 53453)

113

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

Sovermol $^{\rm 8}$ 818 $\underline{\text{shear strength}}$ according to ISO 4587/625 $\text{mm}^{\rm 2}$

Polymer MDI*

MDI (Carbodiimid - modified)**

Fomrez UL 28 (10 %)	Amount = Geltime adjustment to 5 – 10 min	
Mixing ratio	100:57	100:68
Gel-time in hours Coesfield	00:05 h – 00:10 h	00:05 h – 00:10 h
Aluminium (AIMG!) in MPa	4.4 (C)	2.5 (C)
Copper (SF-CuF24) in MPa	1.7 (C)	5.7 (C)
Steel (ST1403) in MPa	<u>6.6</u> (C)	≥ 6.2 (C)
Polyethylene (Simona) in MPa	0.06 (C)	0.05 (C)
PVC (Kömadur ES) in MPa	3.5 (MF)	3.2 (MF)
Wood (Beech) in MPa	<u>7.7</u> (MF)	8.0 (MF)

⁽C) = cohesion failure / (MF) = material failure

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.

^{*} e.g. Lupranat® M 20 S, BASF Polyurethanes

^{*} e.g. Supraspec® 2010, Fa. Huntsman Polyurethanes

^{® =} Registered trademark

^{™ =} Trademark of the BASF Group, unless otherwise noted