Technical Information

Sovermol® 818

We create chemistry

general

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

- 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

shelf life

When stored under the usual appropriate storage conditions, the product can be stored for at least 1 year.

typical properties (no 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)	0.975 - 1,02 g/cm^3

Application

In combination with Polymer MDI Sovermol® 818 can be used for the production of 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.

Application example (without filler)

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 (30g mass).

Shore hardness (ISO 868) (storage/room temperature)	A	D
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

Technical Data

	Sovermol® 818 in combination with Polymer MDI*
Shore D hardness RT (ISO 868)	
after 1 day	18
after 2 days	31
after 3 days	-
after 7 days	-
after 14 days	50
after 28 days	60
Mixing ratio	100:57
Geltime in hours Coesfield	01:24
Tensile strength in MPa (ISO 527-3 Typ5))	18
Elongation in % (ISO 527-3 Typ5)	58
Tear resistance in N/mm (ISO 34-1)	64
Bending strength in MPa (DIN EN ISO 178)	6
Impact resistance in mJ/mm² (DIN 53453)	113

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

Sovermol® 818 shear strength according to ISO 4587/625mm²

	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 (AlMG1) in MPa	4,4 (C)	2.5 (C)
Copper (SF-CuF24) in MPa	1.7 (C)	5.7 (C)
Steel (ST1403) in MPa	6.6 (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	7.7 (MF)	8.0 (MF)

(C) = cohesion failure / (MF) = material failure
* e.g. Lupranat M 20 S, BASF Polyurethanes
** e.g. Supraspec 2010, Fa. Huntsman Polyurethanes

Registration / Regulatory Information

Regulatory Status

AICS (Australia)	○
ENCS (Japan)	○
EINECS (EU)	●
NDSL (Canada)	●
KECI/ECL (Korea)	○
TSCA (USA)	●
IECSC (China)	●
PICCS (Philippines)	○

●	Yes
○	No

Safety
When handling these products, 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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