

Sovermol® 1080

general

Sovermol® 1080 is a polyol used in the manufacturing of polyurethanes

- Universal polyol
- Shore D Hardness ~ 70
- High renewable raw material content
- Excellent impact resistance
- Good 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

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 (DGF C-III 13A)	<= 0.2%
Acid number (DGF C-V 2)	<= 3.0
Hydroxyl number (ISO 4326)	160 - 185
Viscosity (dynamic) (25 °C) (ISO 2555 (MOD.))	2.800 – 4000 mPa·s
Density (20 °C) (DGF C-IV 2B (52))	0.985 - 1.02 g/cm ³

Application

In combination with Polymer MDI Sovermol® 1080 can be used for the production of 2 pack coating and casting materials, crack bridging coatings, in floorings and for adhesives.

In addition, Sovermol® 1080 shows particular water repellency, which results in less sensitivity to moisture while curing.

Mixing Formulation (without filler)

100 g Sovermol® 1080

5 g Zeolith paste

42 g Polymer MDI*

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

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

Shore hardness (ISO 868) (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

Technical Data

Sovermol® 1080 in combination with

	Polymer MDI*	MDI (Carbodiimid - modified)**
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
Geltime in hours Coesfield	00:47	00:39
Tensile strength in MPa (ISO 527-3 Typ5))	17	16
Elongation in % (ISO 527-3 Typ5)	65	81
Tear resistance in N/mm (ISO 34-1)	88	95
Bending strength in MPa (DIN EN ISO 178)	8	-
Impact resistance in mJ/mm ² (DIN 53453)	121	165

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

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

Sovermol® 1080 in combination with

Aliphatic Polyisocyanat HDI-based NCO = 23% */**

Mixing ratio	100:56
Shore D hardness after 2 days storage at 80°C (ISO 868)	33
Tensile strength in MPa (ISO 527-3 Typ5)	5
Elongation in % (ISO 527-3 Typ5)	55
Tear resistance in N/mm (ISO 34-1)	12
Abrasion 120 µm in mg after 1000 rpm – CS 17 (Taber Abraser)	21
Abrasion 1 mm in mg after 1000 rpm – CS 17 (Taber Abraser)	15

* e.g. Basonat LR 9046, BASF SE

** addition of catalyst required

Registration / Regulatory Information

Approvals

CH: 614200 free

Regulatory Status

AICS (Australia)



ENCS/MITI (JP)



EINECS (EU)



TSCA (USA)



DSL (Canada)



PICCS (Philippines)



IECSC (China)



ECL (Korea)



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

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