

Sovermol® 45



general

Sovermol® 45 is a polyol used in the manufacturing of polyurethanes

- Co - polyol (in combination with Sovermol 750 UV-stable)
- Improves glass transition temperature T_g
- High cross-linking density
- Improvement of chemical resistance
- Hydrophilic
- Functionality approx.. 4

chemical nature

Branched polyether

Properties

physical form

Medium viscous, clear liquid

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 (DIN EN 13267)	< 0.15%
Acid number (8687)	< 1.5
Hydroxyl number (8141; ISO 6796-1981)	530 – 610 mgKOH/g
Viscosity (25°C) (ISO 2555)	3000 – 6000 mPa·s
Color APHA (ISO 6271)	< 70

Application

Sovermol® 45 is recommended for solvent-free coatings of high chemical resistances and hardness. It increases the glass transition temperature also.

Sovermol® 45 has normally to be used in combination with other Sovermol® types. As sole polyol it is necessary to homogenize at least 10 minutes to achieve a good compatibility with the isocyanate by increasing the viscosity.

Mixing Formulation (without filler)

100 g Sovermol® 45

5 g Zeolith paste

138 g Polymer MDI*

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

Technical Data

Sovermol® 45 in combination with Sovermol® 750 (30:70)

Stoichiometric cured with Aliphatic Polyisocyanate HDI-based (23% NCO-content)*

Shore D hardness RT (ISO 868)

after 1 day	-
after 2 days	-
after 3 days	-
after 7 days	-
after 14 days	-
after 28 days	81

Mixing ratio 100:128

Glass transition temperature °C 31

DSC method

Tensile strength in MPa 12
(ISO 527-3 Typ5))

Elongation in % 38
(ISO 527-3 Typ5)

Tear resistance in N/mm 55
(ISO 34-1)

Bending strength in MPa 18
(DIN EN ISO 178)

Impact resistance in mJ/mm² 21
(DIN 53453)

* e.g. Basonate LR 9046, BASF SE

Registration / Regulatory Information

Approvals: FDA CFR 21§§ 175.105, 177.1680

Regulatory Status

AICS (Australia)
 ENCS/MITI (JP)
 EINECS (EU)
 TSCA (USA)
 DSL (Canada)
 PICCS (Philippines)
 IECSC (China)
 ECL (Korea)
 NZIoC (New Zealand)

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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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