DURANATETM TKA-90SB



Type Aliphatic Polyisocyanate (HDI Trimer)

Features

High NCO content

Low viscosity

Good coating film appearance

Good weather resistance

Low residual monomer

Applications

Two-component applications

Plastic coatings

Automotive refinishes

Automobile, motorcycle; base coat and top coat

Heavy duty coatings

Typical properties

Appearance Colorless to slightly yellowish clear liquid

Non-volatile 90 wt%

Solvent Solvent naphtha (petroleum), light arom. / Butyl acetate

= 1 / 1 (wt)

NCO content 19.5 wt%

Viscosity 600 mPa · s at 25°C, 600 mPa · s at 23°C

Color value < 1 (Gardner)

NCO equivalent weight Approx. 215

Flash point 47.9°C

Relative density 1.13 (20 °C) (H2O = 1)

These values provide general information and are not part of the product specifications.



Stability / thinnability

DURANATETM TKA-90SB can be thinned with esters, ketones and aromatic hydrocarbons such as ethyl acetate, butyl acetate, methoxypropylacetate(PMA), methyl ethyl ketone, methyl iso-butyl ketone, cyclohexanone, toluene, xylene, Solvesso #100 and mixture thereof. Generally speaking, it has good compatibility with the solvent mentioned. However, the solutions formed must be tested for their storage stability. Only PU grade solvents can be used (max. 0.05% water, absence of reactive groups such as hydroxyl or amines groups). Aliphatic hydrocarbons such as hexane, cyclohexane, methylcyclohexanes and mineral spirits are unsuitable as solvents because of their poor solubility.

| Aromatics | Toluene Xylene Solvesso#100 | ++++ |
|--------------|--|-------|
| Esters | Ethyl acetate n-Butyl acetate | + |
| Ketones | Methyl ethyl ketone Methyl iso-butyl ketone | + |
| Ether-esters | Methoxypropylacetate (PMA) | + |
| Aliphatics | Cyclohexane Methylcyclohexane Mineral spirit | ~ ~ ~ |

+; Soluble, ~; Insoluble

DURANATETM TKA-90SB should not be thinned to below a solid content of 40%. Prolonged storage of solution with lower solid content may result in turbidity and sedimentation.



| Compatibility | | | |
|------------------|-----------|--------------------|----------|
| With polyisocyar | nates | Resin solution | |
| $DURANATE^{TM}$ | 24A-100 | + | |
| | 22A-75PX | + | |
| | 21S-75E | + | |
| | TPA-100 | + | |
| | TPA-90SB | + | |
| | MFA-75X | + | |
| | TSA-100 | + | |
| | TSS-100 | + | |
| | TSE-100 | ~ | |
| | E-402-90T | + | |
| | E-405-80T | + | |
| | D-101 | + | |
| | D-201 | + | |
| VESTANAT | T1890L | + | |
| | T1890E | + | |
| Desmodur | Z4470 | + | |
| | | + : Soluble. ~ : I | nsoluble |

+; Soluble, ~; Insoluble

Desmodur; Covestro AG, VESTANAT; Degussa

| With polyols and | d other resins | Resin solution | Dried film |
|------------------|---------------------|------------------|------------------|
| Acrydic | A801 | + | + |
| | A801-P | + | + |
| | A851 | + | + |
| | 50-257 | + | + |
| Halwemer | F-45 | + | + |
| Hypomer | FX-2050 | + | + |
| | FX-3070 | + | + |
| Setalux | 1198 | + | + |
| | 1753 | + | + |
| Lumiflon | LF-100 | + | + |
| | LF-200 | + | + |
| | LF-400 | + | + |
| | +; Soluble, ~; Inse | oluble + ; Trans | sparent, ~; Hazy |

Acrydic; DIC Co.,Ltd., Halwemer; DSM NeoResins, Hypomer; Deuchem Co.,Ltd., Setalux; Nuplex Resins(ex-Akzo Nobel Resins' product) ,Lumiflon; Asahi Glass Co.,Ltd.

Mixing ratio of DURANATETM TKA-90SB with polyols is based on NCO/OH equivalent ratio of 1/1.

DURANATE™ TKA-90SB



Storage

DURANATETM TKA-90SB is sensitive to moisture and should therefore always be stored in sealed containers.

For further information:

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