

BenyoCoat® BP Series

BenyoCoat® BP series is a special castor oil-based polyester. It can be used in polyurethane elastomers, adhesives, and coatings. Compared with traditional polyols, the polymers formed from the reaction have the following characteristics:

- Advanced Strength
- Good Elongation
- Advanced Adhesion
- Advanced humidity and aging resistance

Application

- Polyurethane thermal conductive structural adhesive
- Structural adhesive
- Potting adhesive
- Thermal conductive adhesive

Data

Series No.	Color	Functionality	Acid Value mgKOH/g	OH Value mgKOH/g	Viscosity mPa·s/25°C
BP-23	Yellow-Brown	2.5	<2	220	1100
BP-27	Yellow-Brown	2	<2	180	3000
BP-31	Yellow-Brown	2	<2	185	2700
BP-35	Yellow-Brown	2.5	<2	215	1200
BP-46	Yellow-Brown	2	<2	190	2200
BP-49	Yellow-Brown	2.5	<2	210	1400
BP-66	Yellow-Brown	2.5	2	200	1700

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BenyoCoat® BPS Series

BenyoCoat® BPS series is Silicone-modified polyether. It can be used for polyurethane elastomers, adhesives, coatings, and polyurethane foaming. Compared to traditional polyols, the product has mechanical strength similar to polyesters, while offering the advantage of better water resistance than polyesters.

- High hydrophobicity
- Adhesion to low surface energy substrates
- Excellent resistance to humid heat aging
- Excellent chemical resistance
- Good acid and alkali resistance

Application

- Foam sealing

Data

Series No.	Color	Functionality	Water Content %	OH Value mgKOH/g	Viscosity mPa·s/25°C
BPS-17	Opalescent liquid	2.5	≤0.1	50 ~ 65	7000 ~ 10000

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BenyoCoat[®] BPD Series

BenyoCoat[®]BPD series is dimer acid modified polyether. It can be used in polyurethane elastomers, adhesives, and coatings. Compared with traditional polyols, the polymers formed from the reaction have the following characteristics:

- High hydrophobicity
- Adhesion to low surface energy substrates
- Advanced humidity and aging resistance
- Outstanding chemical resistance
- Good acid and alkali resistance

Application

- PU system with good adhesions to multiple substrate with low polarity

Data

Series No.	Color	Functionality	Water Content %	OH Value mgKOH/g	Viscosity mPa·s/25°C
BPD-16	Yellow Liquid	2.0	<2	112	3000
BPD-22	Yellow Liquid	2.0	<2	56	15000
Series No.	PE	PC	PET	PVC	PP
BPD-16	○	○	○	○	△
BPD-22	○	○	○	○	△

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BenyoCoat® BI Series

BenyoCoat®BI series is a modified polyurethane prepolymer based on the BP series. It can be used for polyurethane elastomers, adhesives, and coatings. Compared to traditional polyurethane prepolymers, the polymers formed from the reaction possess characteristics such as:

- Good Adhesion
- Advanced humidity and aging resistance

Data

Series No.	Color	NCO %	Viscosity mPa·s/25°C	SG
BI-23	Brown Liquid	23	600	1.18
BI-10	Brown Liquid	10	20000	1.1

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BenyoCoat® BPE Series

BenyoCoat® BPE series is a modified polyurethane prepolymer.

Epoxy resins possess excellent properties, which is why they are used in heavy-duty corrosion-resistant coatings for both indoor and outdoor applications. However, they can become brittle. Epoxy resins are often modified to meet the performance requirements of the final application. For instance, modifications can enhance flexibility, although this may affect the system's hardness. The challenge for epoxy resin formulators is to balance the needs for flexibility and hardness without compromising other performance characteristics.

BenyoCoat® BPE, an epoxy resin functional toughening agent, can overcome this challenge by increasing flexibility (i.e.. achieving so-called impact resistance) while maintaining hardness.

- Good Adhesion Strength
- Advanced humidity and aging resistance

Data

Series No.	Color	NCO %	Viscosity mPa·s/25°C	SG
BPE-620	Yellow~Brown	2.0	30000	1.05

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