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Polymeric adipic ester

BC 1,3-PBA – Poly(1,3-butanediol)adipate

BC 1,3-PBA is a polymeric adipic ester to enhance the flexibility of elastomers. It combines excellent compatibility with very low volatility in polar elastomer systems.

Chemical Data

Common name: Poly(1,3-butanediol)adipate

Chemical name: Hexanedioic acid, polymer with 1,3-butanediol

CAS No.: 24937-93-7 Chemical formula: $C_{10}H_{20}O_6$

Structural formula:

<u>Parameter</u>	Specification	Typical properties
Appearance:	Nearly colourless liquid	Nearly colourless liquid
Viscosity (25 °C) in mPa·s:	1,000-1,300	1,100
APHA colour in Hazen scale:	≤150	140
Acid number in mg _{KOH} /g:	≤1.0	0.4
Saponification value in mg _{KOH} /g:	≈520	525.0
Water content in %:	≤0.1	0.05
Density (50 °C) in g/m³:	1.095-1.115	1.100
Flash point (o.c.) in °C:	≈280	280

Packaging and Storage

Packaging: 50 or 200 kg drums or 1,000 kg IBC

according to customers' requirement

Shelf life: 24 months from the date of manufacture

Storage and transportation: It should be stored in the tightly closed original

packaging in a dry place.

Application

BC 1,3-PBA is used as a plasticiser in elastomeric compounds, especially suitable for compounds based on PVC, VC-Copolymers, NBR, HNBR, ECO, AEM, ACM, PUR and others. Dosage dependent on application and compatibility is usually between 5 and 35 phr, for 100 phr PVC it can be up to 55 phr plasticiser. Its polymeric nature yields a very good extraction

Technical Data Sheet - BC 1,3-PBA



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resistance in contact with non-polar and fatty oils. It shows a good high temperature resistance.

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