1,4-Butanediol (BDO)

1,4-Butanediol (BDO) · RS-BDO · CAS 110-63-4 · Technical Data Sheet · RawSource · rawsource.com/product/1-4-butanediol/

CAS NO.	PRODUCT CODE	PRODUCT TYPE
110-63-4	RS-BDO	Diol · chain extender

1,4-Butanediol (BDO) is a colorless, clear, high boiling liquid. It is completely soluble in water, most alcohols, esters, ketones, glycol ethers and acetates, and may be immiscible or partially miscible in common aliphatic and aromatic or chlorinated hydrocarbons. It is a chemical intermediate used to manufacture polybutylene terephthalate (PBT) and as a component of thermoplastic copolyester elastomers. In polyurethane applications it is primarily used as a component of polyester or as a chain extender.

DISTRIBUTED BY
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Product page: rawsource.com/product/1-4-butanediol/
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GENERAL INFORMATION

Chemical name	1,4-Butanediol
Molecular formula	$C_4H_{10}O_2$
Molecular weight	90.12

RELEASE SPECIFICATION

PARAMETER	SPECIFICATION	TYPICAL
Appearance	Colorless Clear liquid	Conform
Assay (%)	99.5 min	99.76
Color (Hazen, Pt-Co)	10 max	6
Moisture (%)	0.05 max	0.01

Each lot is released against this specification. Lot-specific results are reported on the Certificate of Analysis that ships with every delivery.

KEY FEATURES

- Terminal, primary hydroxyl groups
- Hydrophobic and chemical resistant nature
- As a chain extender, yields crystalline urethane domains that melt and flow at elevated temperatures and phase separate at ambient temperatures, giving tough elastomeric networks
- Provides crystallinity in thermoplastic copolyester elastomers, which gives them elasticity and resilience

APPLICATIONS

- Manufacture of polybutylene terephthalate (PBT)
- Component of thermoplastic copolyester elastomers
- Component of polyester for polyurethane
- Chain extender for thermoplastic urethane elastomers
- Cast urethane elastomers
- BDO-based urethane elastomers for automotive front and rear end fascia, bumpers, fenders and spoilers
- BDO-based urethane elastomers for footwear, electrical enclosures, recreation equipment, appliances and furniture

Applications are those stated for the product. Confirm suitability for each formulation by trials.

HANDLING REQUIREMENTS

- Refer to the Safety Data Sheet for storage and handling.

PACKAGING

- 200 kg drums
- 21.5 mt ISO tank

The information in this Technical Data Sheet is provided for technical evaluation and is believed to be accurate as of the issue date. Typical values are representative and do not constitute a warranty. Binding specifications are those stated on the lot-specific Certificate of Analysis and in the sales contract. Users should verify suitability for their own process and regulatory requirements. Refer to the Safety Data Sheet before handling. Questions: solutions@rawsource.com.