

Product Name: **β-Cyclodextrin**

Catalog No.: 3181

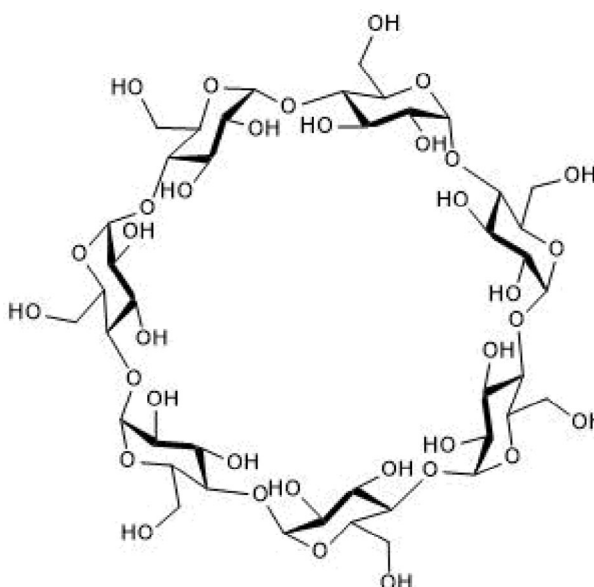
Batch No.: 1

CAS Number: 7585-39-9

EC Number: 231-493-2

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula:	C ₄₂ H ₇₀ O ₃₅
Batch Molecular Weight:	1134.99
Physical Appearance:	White solid
Solubility:	DMSO to 100 mM water to 10 mM
Storage:	Store at RT
Batch Molecular Structure:	



2. ANALYTICAL DATA

HPLC:	Shows 99.3% purity
¹H NMR:	Consistent with structure
Mass Spectrum:	Consistent with structure
Water Content:	11.9 %

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

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CAS Number: 7585-39-9

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Description:

β-Cyclodextrin (β-CD) is a cyclic oligosaccharide comprising seven glucose subunits linked by α-1,4-glycosidic bonds, forming a cage-like supramolecular structure with a hydrophobic interior and a hydrophilic exterior. β-Cyclodextrins can form inclusion complexes with a diverse range of hydrophobic compounds. These complexes increase the aqueous solubility, dissolution rate, and bioavailability of the guest compounds.

Physical and Chemical Properties:

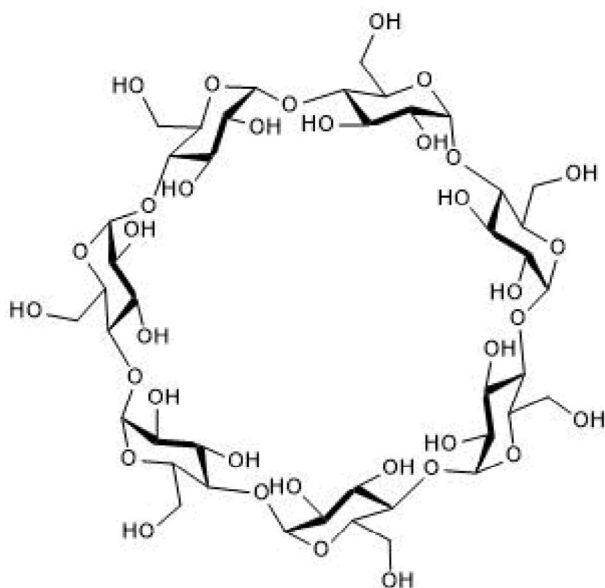
Batch Molecular Formula: C₄₂H₇₀O₃₅

Batch Molecular Weight: 1134.99

Physical Appearance: White solid

Minimum Purity: ≥98%

Batch Molecular Structure:



References:

Armstrong et al (1986) Separation of drug stereoisomers by the formation of beta-cyclodextrin inclusion complexes. *Science* **232** 1132. PMID: 3704640.

Storage: Store at RT

Solubility & Usage Info:

DMSO to 100 mM

water to 10 mM

Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. *Unless contradicted by product-specific protocols or instructions, our standard recommendations apply:

SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

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bio-techne.com

info@bio-techne.com

techsupport@bio-techne.com

North America

Tel: (800) 343 7475

China

info.cn@bio-techne.com

Tel: +86 (21) 52380373

Europe Middle East Africa

Tel: +44 (0)1235 529449

Rest of World

www.tocris.com/distributors

Tel:+1 612 379 2956