



Product Information

(2-Hydroxypropyl)- β -cyclodextrin (DS 4.5), Research grade

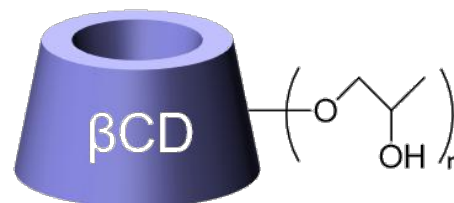
Cat. No.: X23-11-YM159

Size: 1 g; 5 g; 10 g; 25 g

CAS Number: 128446-35-5

Synonym: HPBCD

This product is for research use only and is not intended for diagnostic use.



Product Information

Molecular Weight	1135+n•58.1
Molecular Formula	C ₄₂ H _{70-n} O ₃₅ •(C ₃ H ₇ O) _n
IUPAC Name	(1R,3S,5S,6R,8S,10S,11R,13S,15S,16R,18S,20S,21R,23S,25S,26R,28S,30S,31R,33S,35S,36S,37S,38S,39S,40S,41S,42S,43S,44S,45S,46S,47S,48S,49S)-5,10,15,20,25,30,35-Heptakis(2-hydroxypropoxymethyl)-2,4,7,9,12,14,17,19,22,24,27,29,32,34-tetradecaaoxaocyclclo[31.2.2.23,6.28,11.213,16.218,21.223,26.228,31]nonatetracontane-36,37,38,39,40,41,42,43,44,45,46,47,48,49-tetradecol
InChI	InChI=1S/C63H112O42/c1-22(64)8-85-15-29-50-36(71)43(78)57(92-29)100-51-30(16-86-9-23(2)65)94-59(45(80)38(51)73)102-53-32(18-88-11-25(4)67)96-61(47(82)40(53)75)104-55-34(20-90-13-27(6)69)98-63(49(84)42(55)77)105-56-35(21-91-14-28(7)70)97-62(48(83)41(56)76)103-54-33(19-89-12-26(5)68)95-60(46(81)39(54)74)101-52-31(17-87-10-24(3)66)93-58(99-50)44(79)37(52)72/h22-84H,8-21H2,1-7H3/t22?,23?,24?,25?,26?,27?,28?,29-,30-,31-,32-,33-,34-,35-,36-,37-,38-,39-,40-,41-,42-,43-,44-,45-,46-,47-,48-,49-,50-,51-,52-,53-,54-,55-,56-,57-,58-,59-,60-,61-,62-,63-/m0/s1
InChI Key	ODLHGICHYURWBS-FOSILIAISA-N
Canonical SMILES	CC(COCC1C2C(C(C(O1)OC3C(OC(C(C3O)O)OC4C(OC(C(C4O)O)OC5C(OC(C(C5O)O)OC6C(OC(C(C6O)O)OC7C(OC(C(C7O)O)OC8C(OC(O2)C(C8O)O)COCC(C)O)COCC(C)O)COCC(C)O)COCC(C)O)COCC(C)O)COCC(C)O)O)O
Isomeric SMILES	CC(COC[C@H]1[C@H]2[C@H]([C@@H]([C@@H](O1)O[C@H]3[C@@H](O[C@H]([C@H]([C@@H]3O)O)O[C@H]4[C@@H](O[C@H]([C@H]([C@@H]4O)O)O[C@H]5[C@@H](O[C@H]([C@H]([C@@H]5O)O)O[C@H]6[C@@H](O[C@H]([C@H]([C@@H]6O)O)O[C@H]7[C@@H](O[C@H]([C@H]([C@@H]7O)O)O[C@H]8[C@@H](O[C@@H](O2)[C@H]([C@@H]8O)O)COCC(C)O)COCC(C)O)COCC(C)O)COCC(C)O)O)O
Degree of Polymerization	4.5
Form	White or almost white powder



Purity	>90%
Impurities	Propylene glycol, BCD, hydroxypropylated linear dextrans
Solubility	(2-Hydroxypropyl)- β -cyclodextrin (DS 4.5) is soluble in water, methanol, and DMF at 25°C.
Identity	Confirmed by IR.
Quality Level	Research grade
Applications	(2-Hydroxypropyl)- β -cyclodextrin (DS 4.5) can be used to mask the bitter or unpleasant taste of certain drugs.
Storage	Store at room temperature, in tightly closed container.
