



Product Information

Heptakis(2,6-di-O-methyl)- β -cyclodextrin (DS 14)

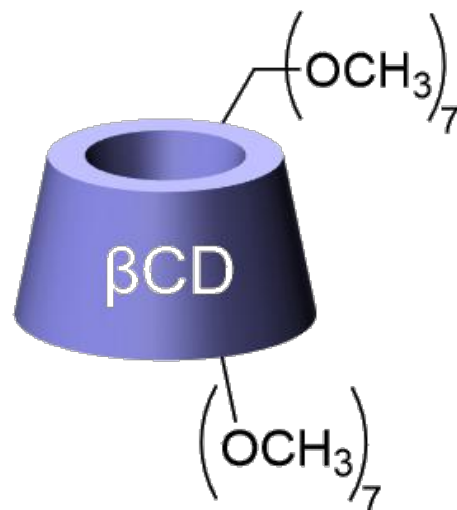
Cat. No.: X23-11-YM116

Size: 1 g; 2 g; 5 g; 10 g

CAS Number: 51166-71-3

Synonym: DIMEB-50

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



Product Information

Molecular Weight	1135.0+n•14.0
Molecular Formula	$C_{42}H_{70-n}O_{35} \cdot (CH_3)_n$
IUPAC Name	(1 <i>S</i> ,3 <i>R</i> ,5 <i>R</i> ,6 <i>S</i> ,8 <i>R</i> ,10 <i>R</i> ,11 <i>S</i> ,13 <i>R</i> ,15 <i>R</i> ,16 <i>S</i> ,18 <i>R</i> ,20 <i>R</i> ,21 <i>S</i> ,23 <i>R</i> ,25 <i>R</i> ,26 <i>S</i> ,28 <i>R</i> ,30 <i>R</i> ,31 <i>S</i> ,33 <i>R</i> ,35 <i>R</i> ,36 <i>S</i> ,37 <i>R</i> ,38 <i>S</i> ,39 <i>R</i> ,40 <i>S</i> ,41 <i>R</i> ,42 <i>S</i> ,43 <i>R</i> ,44 <i>S</i> ,45 <i>R</i> ,46 <i>S</i> ,47 <i>R</i> ,48 <i>S</i> ,49 <i>R</i>)-37,39,41,43,45,47,49-Heptamethoxy-5,10,15,20,25,30,35-heptakis(methoxymethyl)-2,4,7,9,12,14,17,19,22,24,27,29,32,34-tetradecaaoctacyclo[31.2.2.23,6.28,11.213,16.218,21.223,26.228,31]nonatetracontane-36,38,40,42,44,46,48-heptol
InChI	InChI=1S/C56H98O35/c1-64-15-22-36-29(57)43(71-8)50(78-22)86-37-23(16-65-2)80-52(45(73-10)30(37)58)88-39-25(18-67-4)82-54(47(75-12)32(39)60)90-41-27(20-69-6)84-56(49(77-14)34(41)62)91-42-28(21-70-7)83-55(48(76-13)35(42)63)89-40-26(19-68-5)81-53(46(74-11)33(40)61)87-38-24(17-66-3)79-51(85-36)44(72-9)31(38)59/h22-63H,15-21H2,1-14H3/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-/m1/s1
InChI Key	QGKBSGBYSPTPKJ-UZMKXNTCSA-N
Canonical SMILES	COCC1C2C(C(C(O1)OC3C(OC(C(C3O)OC)OC4C(OC(C(C4O)OC)OC5C(OC(C(C5O)OC)OC6C(OC(C(C6O)OC)OC7C(OC(C(C7O)OC)OC8C(OC(O2)C(C8O)OC)COC)COC)COC)COC)COC)COC)OC)O
Isomeric SMILES	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)OC)O[C@@H]4[C@H](O[C@@H]([C@@H]([C@H]4O)OC)O[C@@H]5[C@H](O[C@@H]([C@@H]([C@H]5O)OC)O[C@@H]6[C@H](O[C@@H]([C@@H]([C@H]6O)OC)O[C@@H]7[C@H](O[C@@H]([C@@H]([C@H]7O)OC)O[C@@H]8[C@H](O[C@H](O2)[C@@H]([C@H]8O)OC)COC)COC)COC)COC)COC)OC)O



Degree of Polymerization	14
Form	White to slight yellow powder
Impurities	Beta-cyclodextrin
Solubility	Heptakis(2,6-di-O-methyl)- β -cyclodextrin (DS 14) is soluble in water and DMSO at 25°C.
Quality Level	Fine chemical grade
Applications	Heptakis(2,6-di-O-methyl)- β -cyclodextrin (DS 14) is used in the pharmaceutical industry as an excipient to improve the solubility and bioavailability of drugs.
Storage	Store at room temperature, in tightly closed container.