



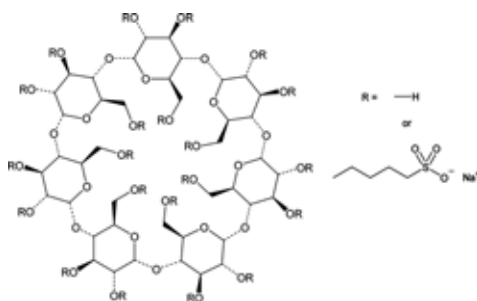
Cyclodextrins

Betadex sulfobutyl ether sodium (sbe-β-cd)

CEP Certificate No.: NO.RO-CEP
2021-025-Rev 00
US FDA DMF NO.: 29394
CAS NO.: 182410-00-0

- **Standard**
USP, EP, Enterprise Standard.
- **Grade**
Injection.
- **Packing**
10 kg/drum, 20 kg/drum, 1 kg/bag, 500 g/bag.
- **Application**
Pharmaceuticals.
- **Main Application**
Solubilizer, wetting agents, chelating agent
(complexing agent) and polyvalent masking agent.

Betadex Sulfobutyl Ether Sodium (SBE-β-CD) is a new type of anionic high soluble cyclodextrin derivatives.

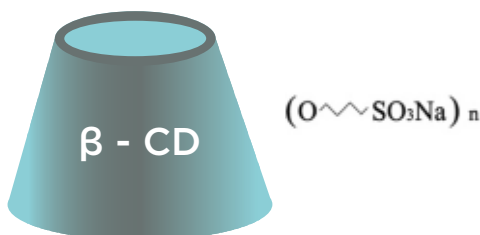


It could include drug molecules to form covalent compounds so that increase the drug's stability, solubility, safety.

It could reduce the renal toxicity, moderate drug's hemolysis, control the release rate and cover up the bad smell.

It has been used in injection, oral, nasal, and eye medicines.

It could has a special affinity and inclusion for nitrogen drugs.



Dimethyl beta cyclodextrin

US FDA DMF NO.: 039021
CAS NO.: 128446-36-6

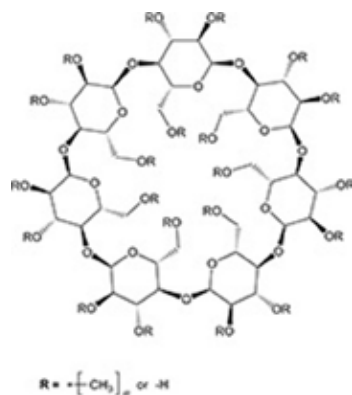
• **Molecular Formula**
C₄₂H₈₀-nO₃₅ (CH₃)_n.

• **Standard**
Enterprise standard.

• **Appearance**
White powder, sweet, insipid and innocuous.

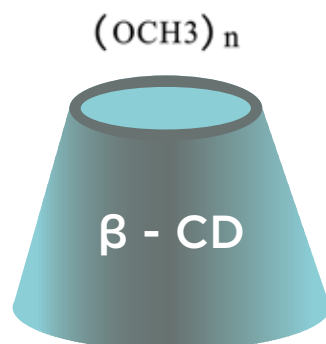
• **Packing**
20 kg/drum, 1 kg/bag.

• **Product Description**
1 In the field of medicine, Dimethyl Beta Cyclodextrin can be used as cosolvent, encapsulation mixture, regulatory release agent, micro capsule, penetrant etc. It can be used in oral, ocular, nasal, rectal, pulmonary, injection and other formulations, playing a role in solubilizing, improving stability and bioavailability, covering up undesirable odor, regulating release speed and so on. It has better solubilization for oil soluble substances.



2 In the field of cosmetics, Dimethyl Beta Cyclodextrin could be made as clathrate with essence or other raw materials to play a slow release, stability and long-term effect, and can be also used as thickening agent, surfactant etc. It has an application in deodorant, perfume, shampoo, skin cream, soap, talcum powder and so on.

3 Other fields: Dimethyl Beta Cyclodextrin can be used for plant extraction, separation of chiral substances, grafting of special functional textiles.



Hydroxypropyl beta cyclodextrin

(INCI NAME: Hydroxypropyl Cyclodextrin)
US FDA DMF NO.: 033403
CAS NO.: 128446-35-5 (94035-02-6)

• **Standard**
EP, USP, BP ChP.

• **Grade**
Oral and Injection.

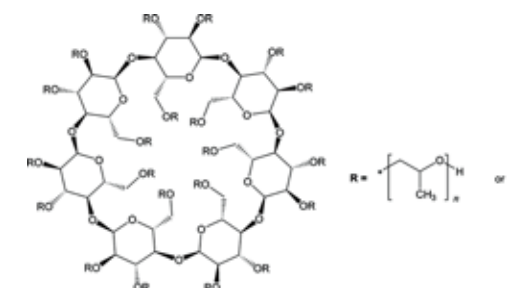
• **Packing**
10 kg/drum, 20 kg/drum,
20 kg/carton, 1 kg/bag, 500 g/bag.

• **Application**
Pharmaceuticals, Food, Cosmetics.

• **Main Application**
Solubilizer, Embedding medium,
Stabilizer, Odor absorber.

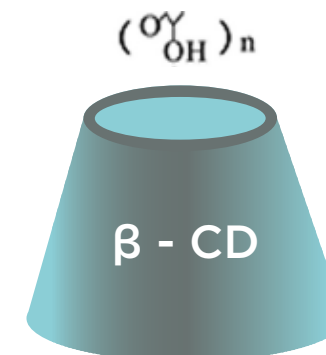
• **In Pharmaceuticals**
Hydroxypropyl Beta Cyclodextrin is a solution to insoluble or low solubility drugs (including plant extracts). Through molecular encapsulation, it could increase the drug solubility and control the release rate of the drug, increase the drug's bioavailability and reduce the toxic side - effects.

• **In Food**
Hydroxypropyl Beta Cyclodextrin could increase the stability of molecular nutrition and long-term effect, cover up or adjust bad smell and tastes of food



nutrition molecular, improve production process and product quality and extend the shelf-life.

• **In Cosmetics**
Hydroxypropyl Beta Cyclodextrin is used as stabilizer, emulsifier and odor absorber. It could reduce organic molecules stimulation to skin mucosal and enhance the stability of the effective components. It prevents volatile, oxidation of nutrient composition, increases the solubility of insoluble flavours and fragrances and keeps the fragrance slow releasing and lasting.



Hydroxypropyl gamma cyclodextrin

Hydroxypropyl Betadex,
 2-Hydroxypropyl Beta
 US FDA DFM NO.: 937123
 CAS NO.: 128446-34-4

- **Molecular Formula**

C₄₈H₈₀N O₄₀- (C₃H₇O)_n.

- **Standard**

Enterprise Standard.

- **Grade**

Injection.

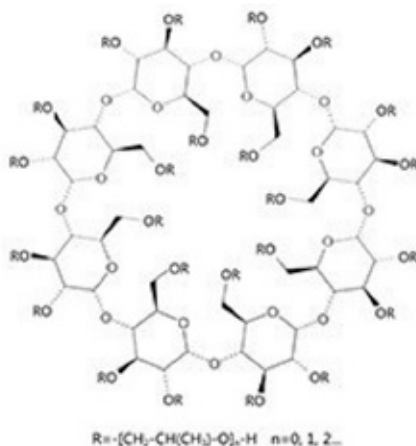
- **Packing**

20 kg/drum, 1 kg/bag.

- **Product Description**

1 In the field of medicine, with larger cavity, Hydroxypropyl Gamma Cyclodextrin is easier to form clathrates with large molecules. It can be used as cosolvent, encapsulation mixture, regulatory release agent, micro-capsule, penetrant etc. It can be used in oral, ocular, nasal, rectal, pulmonary, injection and other formulations, playing a role in solubilizing, improving stability and bioavailability, covering undesirable odor, regulation release speed and so on. It can be better solubilization for oil soluble substances. It's widely used in eye drops.

2 In the field of cosmetics Hydroxypropyl Gamma Cyclodextrin could be made as clathrate with essence or other raw materials to play a slow release, stability and long-term effect, and can also be used as thickening agents, surfactant etc. It has an application in perfume shampoo, skin cream, soap, talcum powder and so on.



3 Other fields: Hydroxypropyl Gamma Cyclodextrin can be used for plant extraction, separation of chiral substances etc.

