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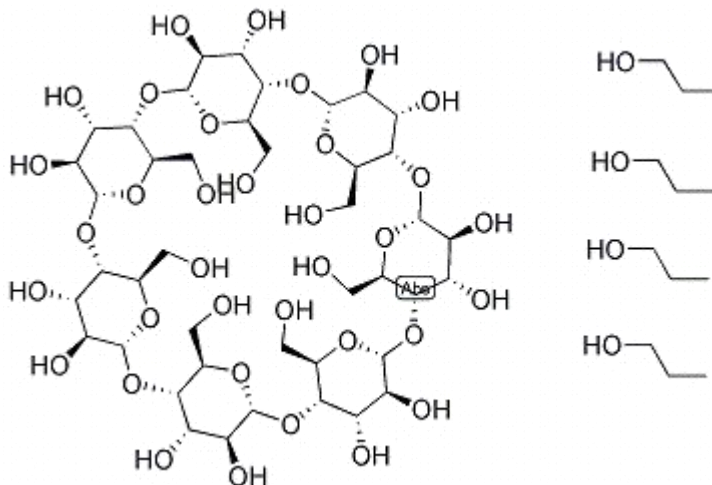
Site: www.tnjchem.com

## Technical Data Sheet

# Hydroxypropyl-beta-cyclodextrin

### Product Information

Chemical Name	Hydroxypropyl-beta-cyclodextrin
CAS #	94035-02-6
Formula	C54H102O39
Molecular Weight	1375.36
Synonyms	HPCD
Chemical Structure	



### Description

Hydroxypropyl-beta-cyclodextrin HPBCD is white crystalline powder, odorless. It is currently the most in-depth study, the most widely used one cyclodextrin derivatives. Mainly used in food, pharmaceutical, cosmetics industries.

### Physical Properties

Melting point, °C .	267 °C (dec.)
Density @ 20°C, g/cm3	H2O: 45 % (w/v)

## Specification

Item	Specification
Appearance	White crystal powder
Purity %	96.0-102.0
Specific Rotation	+159-+164 <sup>o</sup>
Reductive sugar %	≤ 0.2
Loss on drying %	≤14.0
Residue on ignition %	≤0.1
Chloride %	≤0.018
Heavy metals (Pb) ppm	≤10
PH value	5.0-8.0

## Safety

May cause eye, skin, and respiratory tract irritation. The toxicological properties of this material have not been fully investigated.

Always refer to the Material Safety Data Sheet (MSDS)

## Applications

- 1) In the food, spices fields, it can improve the stability and long-term nutritional molecules, can mask or correct nutritional elements of food smells and tastes bad, you can improve the production process and product quality. The product is very good solubility in water, the degree of substitution can be 4 or more miscible in any proportion with water, 50 % ethanol and methanol can also be dissolved.
- 2) In cosmetic raw materials used as a stabilizer, emulsifier, to taste and the like, organic molecules can be reduced in cosmetics mucosal tissue irritation on the skin, enhance the stability of active ingredients, to prevent volatilization of nutrients, oxidation. It has a certain relative hygroscopicity.
- 3) In the pharmaceutical industry, due to the relative surface activity and hemolytic activity is relatively low and is not irritating to muscle, so it is an ideal injection solubilizer and pharmaceutical excipients. Insoluble drugs can increase the water solubility, increased drug stability, improved bioavailability, efficacy of the pharmaceutical dosage increase or decrease, can be adjusted or controlled drug release rate, reduce drug side effects. For oral drugs, injections, drug delivery systems ( including nasal, rectal, cornea, etc. ), transdermal drug delivery systems for targeted drug lipophilic carrier protein can be used as protective agents and stabilizers.

## Packaging

25kg/fiber drum

## Storage & Handling

**Handling:** Use with adequate ventilation. Minimize dust generation and accumulation. Do not get in eyes, on skin, or on clothing. Do not ingest or inhale.

**Storage:** Store in a cool, dry place. Store in a tightly closed container. Store protected from light.

Please refer to the Materials Safety Data Sheet (MSDS) for the handling methods.

Always refer to the Material Safety Data Sheet (MSDS) for detailed information on handling and disposal.

*The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchant ability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall we be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if we has been advised of the possibility of such damages.*

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