



For Better Construction

# Material Safety Data Sheet

## I. PRODUCT IDENTIFICATION

Manufacturer: Beren Chemical Co., Ltd  
Emergency Phone Number:+86 1820 5888 132

Substance: Cellulose Ether(HPMC)  
Trade Names: BetteRcel

Chemical and common name: Hydroxypropyl Methyl Cellulose, HMPC,HPMC

Chemical Name	Percentage	CAS Number
Hydroxypropyl Methyl Cellulose	100%	9004-65-3

Appearance and odor: White to off-white, fibrous or granular powder; odorless

## II. HAZARDS IDENTIFICATION

### Emergency Overview

Spilled powder becomes slippery when wet  
Major Health Hazards: No significant target effects reported  
Physical Hazards: Dust/air mixtures may ignite or explode

### Potential Health Effects

#### Eye Contact

Short Term Effects: Mechanical Irritation  
Long Term Effects: No information is available

#### Skin Contact

Long Term Effects: No information is available  
Long Term Effects: No information is available

#### Ingestion

Short Term Effects: No information on significant adverse effects  
Long Term Effects: Diarrhea

#### Inhalation

Short Term Effects: Mechanical Irritation, chest pain  
Long Term Effects: No information is available

## III. FIRST AID

EYES: Wash eyes immediately with large amounts of water or normal saline, occasionally lifting upper and lower lids until no evidence of chemical

remains. Get medical attention immediately.

**SKIN:** Remove contaminated clothing, jewelry, and shoes immediately. Wash with soap or mild detergent and large amounts of water until no evidence of chemical remains (at least 15 - 20 minutes).  
Get medical attention, if needed.

**INGESTION:** If vomiting occurs, keep head lower than hips to help prevent aspiration. Get medical attention, if needed.

**INHALATION:** Remove from exposure immediately. Use a bag valve mask or similar device to perform artificial respiration (rescue breathing) if necessary. Get medical attention.

#### **IV. FIRE FIGHTING MEASURES**

**Fire and Explosion Hazard:** Slight fire hazard when exposed to heat or flame.  
Dust/air mixtures may ignite or explode.

**Extinguishing:** Media include regular dry chemical, carbon dioxide, water, and regular foam. For larger fires, use regular foam or flood with fine water spray.

**Firefighting:** Move container from fire area if it can be done without risk. Do not scatter spilled material with high-pressure water streams.  
Dike for later disposal. Use extinguishing agents appropriate for surrounding fire. Avoid inhalation of material or combustion by-products. Stay upwind and keep out of low areas.

**Flash Point:** 180° C

#### **V. ACCIDENTAL RELEASE MEASURES**

Collect spilled material in appropriate container for disposal. Keep out of water supplies and sewers. Keep unnecessary people away, isolate hazard area and deny entry.

#### **VI. HANDLING AND STORAGE**

Store and handle in accordance with all current regulations and standards. Keep separated from incompatible substances.

Store in tightly closed container. Store in a cool, dry place. Ventilation required.  
Use only with adequate exhaust ventilation. Follow an organized housekeeping plan.  
Keep floors and equipment clean.

## VII. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure limits: No occupational exposure limits established.

Ventilation: Provide local exhaust ventilation system. Ventilation equipment should be explosion-resistant if explosive concentrations of material are present.  
Ensure compliance with applicable exposure limits.

Eye Protection: Wear splash resistant safety goggles. Provide an emergency eye wash fountain and quick drench shower in the immediate work area.

Clothing: Wear appropriate chemical resistant clothing.

Gloves: Wear appropriate chemical resistant gloves.

Respirator: Under conditions of frequent use or heavy exposure, respiratory protection may be needed. Respiratory protection is ranked in order from minimum to maximum. Consider warning properties before use.

Any dust, mist and vapor respirator.

Any air-purifying respirator with a high-efficiency particulate filter.

Any powered air-purifying respirator with a dust, mist and fume filter.

Any powered air-purifying respirator with a high-efficiency particulate filter.

## VIII. PHYSICAL AND CHEMICAL PROPERTIES.

Physical state: Powder

Color: White to off-white

Odor: Odorless

Boiling Point: Not applicable

Melting Point: Not available

Vapor pressure: Not applicable

Density: 1.3 - 1.4g/cm<sup>3</sup> @ 20° C

Water solubility: 1 g/ml @ 20° C. Soluble

pH: Neutral

Odor threshold: Not available

Evaporation rate: Not applicable

Solvent Solubility: Insoluble in most polar organic solvents; insoluble in alcohol, chloroform and ether.



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#### **IX. STABILITY AND REACTIVITY**

Thermal decomposition / conditions to be avoided

Decomposition starts at: 200° C

Materials to be avoided: None

Dangerous reactions: No dangerous reactions known.

#### **X. TOXICOLOGY INFORMATION**

LD50Data: LD50 oral in rats=5200mg/kg

Health Effects

Dermal: There was only slight primary irritation and no sensitization when human subjects were patch-tested.

Eyes: Application of this product to the eyes of rabbits produced only minimal irritation with complete recovery within 24 hours.

Oral: This product has a low order of toxicity in rats. We believe that this product has a low order of toxicity.

Inhalation: There were no deaths, abnormal behavioral reactions, adverse body weight changes or growth changes in any tissues or organs resulting from an acute dust inhalation study using low viscosity BetteRcel with rats, mice and guinea pigs.

#### **XI. ECOLOGICAL INFORMATION**

Not available

#### **XII. DISPOSAL CONSIDERATIONS**

Dispose in accordance with all applicable regulations.

#### **XIII. TRANSPORTATION INFORMATION**

U.S. Department of Transportation: This product is not regulated by D.O.T. when shipped domestically by land.

LAND TRANSPORT ADR/RID: No classification assigned.

AIR TRANSPORT IATA/ICAO: No classification assigned.

MARITIME TRANSPORT IMDG: No classification assigned.

#### **XIV. REGULATORY INFORMATION**

Labeling according to EU guidelines: No markings required.

Other regulations, limitations and prohibitive regulations:

Beren Chemical Co., Ltd  
[www.bettercel.cn](http://www.bettercel.cn)



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VDI 2263 "Dust fires and dust explosions; hazards, assessment, protective measures.

#### **XV. OTHER INFORMATION**

Additional Information:

No additional information available

The following label hazard ratings are recommended for containers of Hydroxypropyl Methyl Cellulose:

NFPA

Fire: 1

Health: 1

Reactivity: 0

Specific Hazard: None