



## Material Safety Data Sheet

### 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

|                            |  |
|----------------------------|--|
| Product name               | Sodium Carboxymethyl Cellulose also known as CMC   |
| CAS No.                    | 9004-32-4  |
| Company name               | Shijiazhuang Shangdun Cellulose Co., Ltd           |
| Address                    | No.169, Zhufeng Street, Shijiazhuang, Hebei, China |
| Emergency telephone number | 0086-0311-67797705                                 |
| Telephone                  | 0086-0311-84339195                                 |

### 2. HAZARDS IDENTIFICATION

#### **Emergency Overview**

Appearance: solid, powder, off-white

MAY FORM COMBUSTIBLE DUST-AIR MIXTURES.

#### **Potential Health Effects**

##### **Exposure routes**

Inhalation, Skin contact, Eye Contact, Ingestion

##### **Eye contact**

Unlikely to cause eye irritation or injury.

##### **Skin contact**

Unlikely to cause skin irritation or injury.

##### **Ingestion**

Swallowing this material is not likely to be harmful.

##### **Inhalation**

It is possible to breathe this material under certain conditions of handling and use (for example, during heating, spraying, or stirring). Breathing small amounts of this material during normal handling is not likely to cause harmful effects. Breathing large amounts may be harmful. Symptoms are not expected at air concentrations below the recommended exposure limits, if applicable (see Section 8.).



**Aggravated Medical Condition**

No data.

**Symptoms**

Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include: irritation (nose, throat, airways) No symptoms known or expected.

**Target Organs**

No data.

**Carcinogenicity**

This material is not listed as a carcinogen by the International Agency for Research on Cancer (IARC), the National Toxicology Program (NTP), or the Occupational Safety and Health Administration (OSHA). This material is not listed as a carcinogen by the International Agency for Research on Cancer (IARC), the National Toxicology Program (NTP), or the Occupational Safety and Health Administration (OSHA).

**Reproductive hazard**

Based on the available information, risk to the fetus from maternal exposure to this material cannot be assessed.

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

WHMIS hazardous composition: No ingredients are hazardous according to the CPR criteria.

**4. FIRST AID MEASURES**

**General Information**

No hazards which require special first aid measures.

**Eyes**

Remove contact lenses. Protect unharmed eye.

**Skin**

First aid is not normally required. However, it is recommended that exposed areas be cleaned by washing with soap and water.

**Ingestion**

Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician.

**Inhalation**

If breathed in, move person into fresh air. If unconscious, place in recovery position and seek medical advice. If symptoms persist, call a physician.



**Notes to physician**

**Hazards:** No information available.

**Treatment:** No hazards which require special first aid measures.

**5. FIREFIGHTING MEASURES**

**Suitable extinguishing media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment., Water spray, Foam

**Hazardous combustion products**

carbon dioxide and carbon monoxide

**Precautions for fire-fighting**

Organic dusts at sufficient concentration can form explosive mixtures in air. Do not allow run-off from fire fighting to enter drains or water courses. In the event of fire, wear self-contained breathing apparatus. Standard procedure for chemical fires.

**NFPA Flammable and Combustible Liquids Classification**

Not applicable

**6. ACCIDENTAL RELEASE MEASURES**

**Personal precautions**

For personal protection see section 8. Avoid dust formation. Avoid breathing dust. Material can create slippery conditions. Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed.

**Environmental precautions**

Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up**

Pick up and arrange disposal without creating dust. Keep in suitable, closed containers for disposal.

**Other information**

Comply with all applicable federal, state, and local regulations.



## 7. HANDLING AND STORAGE

### Handling

Avoid dust formation. Ensure all equipment is electrically grounded and bonded before beginning transfer operations. The material can accumulate static charge and can therefore cause electrical ignition of flammable atmospheres. Smoking, eating and drinking should be prohibited in the application area. For personal protection see section 8. Maintain good housekeeping. Do not permit dust layers to accumulate, for example, on floors, ledges, and equipment, in order to avoid any potential for dust explosion hazards. For further guidance on prevention of dust explosions, refer to National Fire Protection Association (NFPA) 654: "Standard for the Prevention of Fire and Dust Explosions, from the Manufacturing, Processing and Handling of Combustible Particulate Solids". Take measures to prevent the build up of electrostatic charge. Provide appropriate exhaust ventilation at places where dust is formed.

### Storage

No smoking. Keep in a dry place. No decomposition if stored and applied as directed.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Exposure Guidelines

Contains no substances with occupational exposure limit values.

### General advice

These recommendations provide general guidance for handling this product. Personal protective equipment should be selected for individual applications and should consider factors which affect exposure potential, such as handling practices, chemical concentrations and ventilation. It is ultimately the responsibility of the employer to follow regulatory guidelines established by local authorities.

Avoid breathing dust.

### Exposure controls

Provide appropriate exhaust ventilation at places where dust is formed. General room ventilation should be adequate for normal conditions of use. However, if unusual operating conditions exist, provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below exposure guidelines (if applicable) or below levels that cause known, suspected or apparent adverse effects.

### Eye protection

Safety glasses

### Skin and body protection

Wear as appropriate:

Safety shoes

Wear resistant gloves (consult your safety equipment supplier).

### Respiratory protection

No personal respiratory protective equipment normally required.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

|                                    |                                     |
|------------------------------------|-------------------------------------|
| <b>Physical state</b>              | solid                               |
| <b>Form</b>                        | powder                              |
| <b>Colour</b>                      | off-white                           |
| <b>Odour</b>                       | odourless                           |
| <b>Boiling point/boiling range</b> | / No data available                 |
| <b>pH</b>                          | 6.5 - 8.5 (as aqueous solution)     |
| <b>Flash point</b>                 | Not applicable                      |
| <b>Ignition temperature</b>        | 360.00 °C                           |
| <b>Evaporation rate</b>            | No data available                   |
| <b>Vapour pressure</b>             | No data available                   |
| <b>Density</b>                     | 1.59 g/cm <sup>3</sup>              |
| <b>Bulk density</b>                | 500 - 1,000 kg/m <sup>3</sup>       |
| <b>Water solubility</b>            | soluble, Limited by viscosity       |
| <b>Solubility(ies)</b>             | No data available                   |
| <b>Auto-ignition temperature</b>   | No data available No data available |
| <b>Viscosity, dynamic</b>          | No data available                   |
| <b>Viscosity, kinematic</b>        | No data available                   |
| <b>Decomposition temperature</b>   | No data available                   |

**10. STABILITY AND REACTIVITY****Stability**

Stable under recommended storage conditions.

**Conditions to avoid**

UV light., Exposure to sunlight. Keep away from heat, flame, sparks and other ignition sources.

**Incompatible products**

Acids, Bases, Oxidizing agents

**Hazardous decomposition products**

No hazardous decomposition products are known.

**Hazardous reactions**

Dust may form explosive mixture in air.

**Thermal decomposition**

No data available



**11. TOXICOLOGICAL INFORMATION**

Information on likely routes of exposure : Inhalation  
Skin contact  
Eye Contact  
Ingestion

**Product**

Acute oral toxicity : No data available

Acute inhalation toxicity : LC50 Rat: > 5,800 mg/l  
Test atmosphere: dust/mist

Acute dermal toxicity : LD50 Rabbit: > 2,000 mg/kg

Skin corrosion/irritation : No data available

Serious eye damage/eye irritation : Unlikely to cause eye irritation or injury.  
Product dust may be irritating to eyes, skin and respiratory system.  
Unlikely to cause eye irritation or injury.  
Product dust may be irritating to eyes, skin and respiratory system.

Respiratory or skin sensitisation : No data available

Aspiration toxicity : No aspiration toxicity classification

Further information : No data available

**Components:**

No data available

**12. ECOLOGICAL INFORMATION**

**Ecotoxicity**

**Product:**

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): > 100 mg/l  
Exposure time: 96 h  
Test Method: static test

LC50 (Lepomis macrochirus (Bluegill sunfish)): > 100 mg/l  
Exposure time: 96 h  
Test Method: static test



**Components:**

No data available

**Persistence and degradability**

**Product:**

Biodegradability : Inherently biodegradable.

**Components:**

No data available

**Bioaccumulative potential**

**Product:**

Partition coefficient: n-octanol/water : No data available

**Components:**

No data available

**Mobility in soil**

**Product:**

No data available

**Components:**

No data available

**Other adverse effects**

**Product:**

Additional ecological information : No data available

**13. DISPOSAL CONSIDERATIONS**

**Waste disposal methods**

Dispose of in accordance with all applicable local, state and federal regulations.  
Empty remaining contents.



**14. TRANSPORT INFORMATION**

**REGULATION**

| ID NUMBER | PROPER SHIPPING NAME | *HAZARD CLASS | SUBSIDIARY HAZARDS | PACKING GROUP | MARINE POLLUTANT / LTD. QTY. |
|-----------|----------------------|---------------|--------------------|---------------|------------------------------|
|-----------|----------------------|---------------|--------------------|---------------|------------------------------|

**U.S. DOT - ROAD**

Not dangerous goods

**CFR\_RAIL\_C**

Not dangerous goods

**U.S. DOT - INLAND WATERWAYS**

Not dangerous goods

**TDG\_ROAD\_C**

Not dangerous goods

**TDG\_RAIL\_C**

Not dangerous goods

**TDG\_INWT\_C**

Not dangerous goods

**INTERNATIONAL MARITIME DANGEROUS GOODS**

Not dangerous goods

**INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO**

Not dangerous goods

**INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER**

Not dangerous goods

**MX\_DG**

Not dangerous goods

\*ORM = ORM-D, CBL = COMBUSTIBLE LIQUID





Dangerous goods descriptions (if indicated above) may not reflect quantity, end-use or region-specific exceptions that can be applied. Consult shipping documents for descriptions that are specific to the shipment.

#### 15. REGULATORY INFORMATION

##### WHMIS Classification

Not Rated

WHMIS Ingredient Disclosure List IDL: No component is listed on the WHMIS ingredients disclosure list.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

**Canadian National Pollutant Release Inventory (NPRI)** Canadian National Pollutant Release Inventory (NPRI): No component is listed on NPRI.

##### Notification status

|  |                      |
|--|----------------------|
| Canadian Domestic Substances List (DSL)                            | y (positive listing) |
| Australia Inventory of Chemical Substances (AICS)                  | y (positive listing) |
| Japan. ENCS - Existing and New Chemical Substances Inventory       | y (positive listing) |
| Korea. Korean Existing Chemicals Inventory (KECI)                  | y (positive listing) |
| Philippines Inventory of Chemicals and Chemical Substances (PICCS) | y (positive listing) |
| China. Inventory of Existing Chemical Substances in China (IECSC)  | y (positive listing) |
| United States TSCA Inventory                                       | y (positive listing) |

|                  | HMIS | NFPA |
|------------------|------|------|
| Health           | 0    | 0    |
| Flammability     | 0    | 1    |
| Physical hazards | 0    |      |
| Instability      |      | 0    |
| Specific Hazard  | --   | --   |



16. OTHER INFORMATION

List of abbreviations and acronyms that could be, but not necessarily are, used in this safety data sheet :

ACGIH : American Conference of Industrial Hygienists

BEI : Biological Exposure Index

CAS : Chemical Abstracts Service (Division of the American Chemical Society).

CMR : Carcinogenic, Mutagenic or Toxic for Reproduction

FG : Food grade

GHS : Globally Harmonized System of Classification and Labeling of Chemicals.

H-statement : Hazard Statement

IATA : International Air Transport Association.

IATA-DGR : Dangerous Goods Regulation by the "International Air Transport Association" (IATA).

ICAO : International Civil Aviation Organization

ICAO-TI (ICAO) : Technical Instructions by the "International Civil Aviation Organization"

IMDG : International Maritime Code for Dangerous Goods

ISO : International Organization for Standardization

logPow : octanol-water partition coefficient

LCxx : Lethal Concentration, for xx percent of test population

LDxx : Lethal Dose, for xx percent of test population.

ICxx : Inhibitory Concentration for xx of a substance

Ecxx : Effective Concentration of xx

N.O.S.: Not Otherwise Specified

OECD : Organization for Economic Co-operation and Development

OEL : Occupational Exposure Limit

P-Statement : Precautionary Statement

PBT : Persistent , Bioaccumulative and Toxic

PPE : Personal Protective Equipment

STEL : Short-term exposure limit

STOT : Specific Target Organ Toxicity

TLV : Threshold Limit Value

TWA : Time-weighted average

vPvB : Very Persistent and Very Bioaccumulative

WEL : Workplace Exposure Level

CERCLA : Comprehensive Environmental Response, Compensation, and Liability Act

DOT : Department of Transportation

FIFRA : Federal Insecticide, Fungicide, and Rodenticide Act

HMIRC : Hazardous Materials Information Review Commission

HMIS : Hazardous Materials Identification System

NFPA : National Fire Protection Association

NIOSH : National Institute for Occupational Safety and Health

OSHA : Occupational Safety and Health Administration

PMRA : Health Canada Pest Management Regulatory Agency

RTK : Right to Know

WHMIS : Workplace Hazardous Materials Information System