



1. Identification of the substance/preparation and of the company/undertaking

1.1 Product Identifiers:	Product Name: Zencellose M Methyl Hydroxypropyl cellulose
1.2 Relevant identified uses of the substance or mixture and uses advised against:	Identified Uses: Thickener, binder, film former, processing aid.
1.3 Details of the supplier of the safety data sheet:	Manufactured by: Haishen New Materials Co. Ltd. Lihai Industrial Zone Shangyu, Zhejiang, China, 312366 Exclusively to be Marketed by: Zen Global Solutions 2900 W Anderson Lane Austin, TX, 78653 USA Customer Information Number: +1-512-696-1570 SDS@ZenGlobalSolutions.com
1.4 Emergency Telephone Number:	+1-512-696-1570

2. Hazards Identification

2.1 Classification of the substance or mixture:	Classification - REGULATION (EC) No 1272/2008 This product is not classified as dangerous according to EC criteria. Classification according to EU Directives 67/548/EEC or 1999/45/EC This product is not classified as dangerous according to EC criteria.
2.2 Label elements:	Labelling - REGULATION (EC) No 1272/2008 This product is not classified as dangerous according to EC criteria.
2.3 Other Hazards:	No information available.

3. Composition/information on ingredients

3.1 Substance: This product is a substance.

CAS No.	EC No.	REACH Number	Component	Amount	Classification: REGULATION (EC) No. 1272/2008, 67/548/EEC
9004-65-3	Polymer	—	Modified Cellulose	≥85% ~ ≤92%	Not classified
7647-14-5	231-598-3	—	Sodium Chloride	≤3%	Not classified
7732-18-5	231-791-2	—	Water	≤6%	Not classified

4. First Aid Measures

4.1 Description of first aid measures:

General advice:

If potential for exposure exists refer to Section 8 for specific personal protective equipment.

Inhalation:

Move person to fresh air; if effects occur, consult a physician.

Skin Contact:

Wash skin with plenty of water.

Eye Contact:

Flush eyes with plenty of water; remove contact lenses after the first 1-2 minutes then continue flushing for several minutes. Only mechanical effects expected. If effects occur, consult a physician, preferably an ophthalmologist.

Ingestion:

No emergency medical treatment necessary.

4.2 Most important symptoms and effects, both acute and delayed:

Aside from the information found under Description of first aid measures (above) and Indication of immediate medical attention and special treatment needed (below), no additional symptoms and effects are anticipated.

4.3 Indication of immediate medical attention and special treatment needed:

No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

5. Fire Fighting Measures

5.1 Extinguishing Media:

Water. Dry chemical fire extinguishers. Carbon dioxide fire extinguishers.

5.2 Special hazards arising from the substance or mixture:

Hazardous Combustion Products:

During a fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and/or irritating. Combustion products may include and are not limited to: Carbon monoxide. Carbon dioxide.

Unusual Fire and Explosion Hazards:

Do not permit dust to accumulate. When suspended in air dust can pose an explosion hazard. Minimize ignition sources. If dust layers are exposed to elevated temperatures, spontaneous combustion may occur. Pneumatic conveying and other mechanical handling operations can generate combustible dust. To reduce the potential for dust explosions, electrically bond and ground equipment and do not permit dust to accumulate. Dust can be ignited by static discharge.

5.3 Advice for firefighters:

Fire Fighting Procedures:

Keep people away. Isolate fire and deny unnecessary entry. Soak thoroughly with water to cool and prevent re-ignition. Cool surroundings with water to localize fire zone. Hand held dry chemical or carbon dioxide extinguishers may be used for small fires. Dust explosion hazard may result from forceful application of fire extinguishing agents.

Special Protective Equipment for Firefighters:

Wear positive-pressure self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, trousers, boots, and gloves). If protective equipment is not available or not used, fight fire from a protected location or safe distance.

6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures:	Spilled material may cause a slipping hazard. Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection.
6.2 Environmental precautions:	Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12, Ecological Information.
6.3 Methods and materials for containment and cleaning up:	Contain spilled material if possible. Sweep up. Use care to minimize generation of airborne dust. Do not use water for cleanup. Collect in suitable and properly labeled containers. See Section 13, Disposal Considerations, for additional information.

7. Handling and Storage

7.1 Precautions for safe handling:	Keep away from heat, sparks and flame. No smoking, open flames or sources of ignition in handling and storage area. Electrically ground and bond all equipment. Good housekeeping and controlling of dusts are necessary for safe handling of product. Pneumatic conveying and other mechanical handling operations can generate combustible dust. To reduce the potential for dust explosions, electrically bond and ground equipment and do not permit dust to accumulate. Dust can be ignited by static discharge. See Section 8, EXPOSURE CONTROLS AND PERSONAL PROTECTION.
7.2 Conditions for safe storage, including any incompatibilities:	Store in a dry place, between 5 - 35 °C. See Section 10 for more specific information.
7.3 Specific end uses:	See the technical data sheet on this product for further information.

8. Exposure Controls / Personal Protection

8.1 Control parameters:

Exposure Limits:
None established.

8.2 Exposure controls:

8.2.1 Personal Protection:

Eye/Face Protection:

Use safety glasses (with side shields). Safety glasses (with side shields) should be consistent with EN 166 or equivalent. If there is a potential for exposure to particles which could cause eye discomfort, wear chemical goggles. Chemical goggles should be consistent with EN 166 or equivalent.

Skin Protection:

No precautions other than clean body-covering clothing should be needed. Hand protection: Chemical protective gloves should not be needed when handling this material. Consistent with general hygienic practice for any material, skin contact should be minimized.

Respiratory Protection:

Respiratory protection should be worn when there is a potential to exceed the exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, wear respiratory protection when adverse effects, such as respiratory irritation or discomfort have been experienced, or where indicated by your risk assessment process. In dusty or misty atmospheres, use an approved particulate respirator. Use the following CE approved air-purifying respirator: Particulate filter, type P2.

Ingestion:

Use good personal hygiene. Do not consume or store food in the work area. Wash hands before smoking or eating.

8.2.2. Engineering Controls:

Ventilation:

Use local exhaust ventilation, or other engineering controls to maintain airborne levels below exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, general ventilation should be sufficient for most operations. Local exhaust ventilation may be necessary for some operations.

9. Physical and Chemical Properties

9.1 Information on basic physical and chemical properties:

Physical appearance:	White to off-white Powder or granules
Odor:	Odorless
Odor threshold:	No test data available
pH	Not applicable
Boiling Point:	Not applicable
Melting Point:	Not applicable
Evaporation rate:	No test data available
Vapor Pressure:	Not applicable
Specific Gravity in Water	No test data available
Water Solubility	Only soluble in cold water.
Flammability (solid, gas)	No
Flammable Limits In Air	No test data available for lower and upper limites
Autoignition Temperature	No test data available
Decomposition Temperature	No test data available

9.2 Other information:

10. Stability and Reactivity

10.1 Reactivity:	Stable at normal temperatures and pressures. Avoid heat, flames, sparks and other sources of ignition. Avoid contact with incompatible materials.
10.2 Chemical stability:	Stable under recommended storage conditions. See Storage, Section 7.
10.3 Possibility of hazardous reactions:	Will not polymerize.
10.4 Conditions to Avoid:	Avoid temperatures above 130 °C. Exposure to elevated temperatures can cause product to decompose. Avoid static discharge.
10.5 Incompatible Materials:	Avoid contact with oxidizing materials. Avoid contact with: Strong acids. Strong bases.
10.6 Hazardous decomposition products:	Decomposition products depend upon temperature, air supply and the presence of other materials. Thermal decomposition products may include toxic oxides of carbon.

11. Toxicology Information

11.1 Information on toxicological effects:

11.1.1 Acute Toxicity:

Inhalation:

Dusts may cause mechanical irritation of the nose and throat and cause a coughing or chest discomfort. No narcotic effects.

Skin:

Prolonged skin contact is unlikely to result in absorption of harmful amounts nor cause skin irritation.

Eye:

Solid or dust may cause irritation or corneal injury due to mechanical action.

Ingestion:

Very low toxicity if swallowed. Harmful effects not anticipated from swallowing small amounts. Single dose oral LD50 has not been determined.

11.1.2 Repeated Dose Toxicity:

Repeated ingestion of similar cellulose by humans has not resulted in known significant adverse effects.

11.1.3 Chronic Toxicity and Carcinogenicity:

Similar cellulose did not cause cancer in long-term animal studies.

11.1.4 Developmental Toxicity:

Similar cellulose did not cause birth defects or other toxic effects to the fetus in laboratory animal studies.

11.1.5 Reproductive Toxicity:

In animal studies, a similar cellulose has been shown not to interfere with reproduction.

11.1.6 Genetic Toxicology:

Similar cellulose were negative in both in vitro and animal genetic toxicity studies.

12. Ecological Information

12.1 Toxicity:

Data for Component: Modified cellulose:

For similar material(s): Not expected to be acutely toxic to aquatic organisms.

12.2 Persistence and Degradability:

Data for Component: Modified cellulose:

Material is not readily biodegradable according to OECD / EEC guidelines and following tests:

Biodegradation	Exposure Time	Method	10 Day Window
0%	28d	OECD 301E Test	Fail
11%	28d	OECD 302B Test	Not applicable



13. Disposal Considerations

13.1 Waste treatment methods: Any disposal practice must be in compliance with all local and national laws and regulations. Do not dump into any sewers, on the ground, or into any body of water.

14. Transportation Information

ROAD & RAIL:	NOT REGULATED
OCEAN:	NOT REGULATED
AIR:	NOT REGULATED
INLAND WATERWAYS:	NOT REGULATED

15. Regulatory Information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture:	European Inventory of Existing Commercial Chemical Substances (EINECS): This product is a polymer according to the definition in Directive 92/32/EEC (7th Amendment to Directive 67/548/EEC) and all of its starting materials and intentional additives are listed in the European Inventory of Existing Commercial Chemical Substances (EINECS) or in compliance with European (EU) chemical inventory requirements.
15.2 Chemical Safety Assessment:	Not Applicable

16. Other Information

Hazard statement in the composition section:	
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