

SAFETY DATA SHEET
METHOCEL™ F50

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier:

Product name: METHOCEL™ F50

Chemical name: Cellulose, 2-hydroxypropyl methyl ether

CAS-No.: 9004-65-3

1.2 Relevant identified uses of the substance or mixture and uses advised against:

Identified uses:	Uses advised against:
Pharmaceuticals., Food., Processing aid., Softening agent, Film, Additive, Cleaning agent, Food additive., Binder,	None under normal use conditions

1.3 Details of the supplier of the safety data sheet:

Supplier:

PS Biopolymer GmbH & Co. KG
Bützflether Sand 9
21683 Stade, Germany

E-mail: sds@roquette.com

Supplier:

Nutrition & Biosciences USA 1, LLC
200 Powder Mill Rd, Bldg. 400
Wilmington, Delaware, 19803 USA

Telephone: + 1 800 255 6837

1.4 Emergency telephone number:

American Association of Poison Control Centers : 1-800-222-1222 (24/7)/911

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture:

US GHS Classification (29 CFR 1910.1200):

Combustible dusts

May form combustible dust concentrations in air.

2.2 Label elements:

Signal words:

Hazard

Statement(s):

Warning

Combustible dusts / May form combustible dust concentrations in air.

2.3 Other hazards:

No data available.

SECTION 3: Composition/information on ingredients

3.1 Substance:

Chemical name	Concentration	CAS-No.
Cellulose, 2-hydroxypropyl methyl ether	>=95 - <=100%	9004-65-3

SECTION 4: First aid measures

4.1 Description of first aid measures:

Inhalation:	IF INHALED: Move the exposed person to fresh air at once. Get medical attention if any discomfort continues.
Eye contact:	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation persists after washing.
Skin contact:	Wash with soap and water. If skin irritation or an allergic skin reaction develops, get medical attention.
Ingestion:	Never give liquid to an unconscious person. Drink plenty of water. Get medical attention if symptoms occur.

4.2 Most important symptoms and effects, both acute and delayed: Dust may irritate the eyes and the respiratory system.

4.3 Indication of any immediate medical attention and special treatment needed:

Treatment:	Treat symptomatically.
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SECTION 5: Firefighting measures

5.1 Extinguishing media:

Suitable extinguishing media:	Water spray.
Unsuitable extinguishing media:	Dry chemicals or foams. Straight Streams of Water

5.2 Special hazards arising from the substance or mixture: Fire or excessive heat may produce hazardous decomposition products. See Section 10. Combustible dusts : may form an explosible mixture in the air.

5.3 Advice for firefighters:

Special Fire Fighting Procedures:	Avoid dust cloud to prevent explosion risk. Do not use water jet as an extinguisher, as this would spread the fire.
Special protective equipment for fire-fighters:	Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

SECTION 6: Accidental release measures

- 6.1 Personal precautions, protective equipment and emergency procedures:** See Section 8 of the SDS for Personal Protective Equipment.
- 6.2 Environmental precautions:** Avoid discharge into drains, water courses or onto the ground. Avoid release to the environment.
- 6.3 Methods and material for containment and cleaning up:** Remove material, as much as possible, using mechanical equipment. Avoid dust cloud to prevent explosion risk. Collect and dispose of spillage as indicated in section 13 of the SDS.
- 6.4 Reference to other sections:** For waste disposal, see section 13 of the SDS.

SECTION 7: Handling and storage

- 7.1 Precautions for safe handling:** Avoid generation and spreading of dust. Avoid contact with eyes, skin, and clothing. Avoid heat, sparks, open flames and other ignition sources. Provide good ventilation. See Section 5 of the SDS for prevention of combustible dust risk.
- 7.2 Conditions for safe storage, including any incompatibilities:** Store in original container. Keep containers tightly closed. Keep container in a well-ventilated place. Store in a dry place. Avoid exposure to high temperatures or direct sunlight.
- 7.3 Specific end use(s):** Pharmaceuticals., Food., Processing aid., Softening agent, Film, Additive, Cleaning agent, Food additive., Binder,

SECTION 8: Exposure controls/personal protection

8.1 Control parameters:

Occupational exposure limits:

This product does not contain any components >1% with specific occupational exposure limits.

Chemical name	Type	Exposure Limit Values	Source
Dust - Inhalable particles.	TWA	10 mg/m ³	US. ACGIH Threshold Limit Values (2019)
Dust - Respirable particles.	TWA	3 mg/m ³	US. ACGIH Threshold Limit Values (2019)
Dust - Respirable fraction.	PEL	5 mg/m ³	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
Dust - Total dust.	PEL	15 mg/m ³	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
Dust - Total dust.	TWA	15 mg/m ³	US. OSHA Table Z-3 (29 CFR 1910.1000) (2016)
Dust - Respirable fraction.	TWA	5 mg/m ³	US. OSHA Table Z-3 (29 CFR 1910.1000) (2016)

8.2 Exposure controls:

Appropriate engineering controls: Provide adequate ventilation. Observe Occupational Exposure Limits and minimize the risk of inhalation of dust.

Individual protection measures, such as personal protective equipment:

Eye/face protection: Wear dust-proof safety goggles where there is a risk of eyes contact. (EN 166)

Skin protection:

Hand Protection: Wear suitable gloves.

Other: Wear suitable protective clothing.

Respiratory Protection: In case of inadequate ventilation or risk of inhalation of dust, use suitable respiratory equipment with particle filter (type P1). (EN 143)

Hygiene measures: Handle the product in accordance with the good hygiene practices and safety instructions.

Environmental exposure controls: Do not allow runoff to sewer, waterway or ground.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties:

Physical State:	solid
Form:	Powder
Color:	White
Odor:	Odorless
pH:	5 - 8
Melting Point:	Not Applicable No data available.
Boiling Point:	Not applicable or not available
Flash Point:	Not applicable or not available
Evaporation Rate:	Not Applicable
Vapor pressure:	Not Applicable
Vapor density (air=1):	Not Applicable
Partition coefficient (n-octanol/water):	No data available.

Explosive properties: Combustible dusts : may form an explosible mixture in the air.

MIT (Minimum ignition temperature):	MITc (cloud) : > 270 °C (EN 50281-2-1 / ASTM E1491) MITL (5mm Layer) : > 300 °C (EN 50281-2-1/ ASTM E2021)
MIE (Minimum Ignition Energy):	> 30 mJ (EN 13821 / ASTM E2019, Without Inductance (<25µH), <63 µm)
Pmax (Maximum Explosion OverPressure) ±10%:	~ 9 bar (EN 14034-1 / ASTM E1226)
Kst value (±20%):	~ 200 barm/s (EN 14034-2 / ASTM E1226)
Dust Explosion Class:	st 1 (VDI 3673)
Volume resistivity:	> 10 ⁶ Ω.m (IEC 61241-2-2 / Group IIIB non-conductive dust.)
Other Data:	MEC (Minimum Explosible Concentration) : 30-60 g/m3 (EN 14034-3 ASTM E1515)

9.2 Other information:

The data reported in this section does not take the place of specifications.

SECTION 10: Stability and reactivity

- 10.1 Reactivity:** Strong oxidizing agents.
- 10.2 Chemical stability:** Material is stable under normal conditions.
- 10.3 Possibility of hazardous reactions:** No hazardous reactions under ordinary conditions of use and storage.
- 10.4 Conditions to avoid:** Avoid dust cloud to prevent explosion risk. Dust clouds may explode under certain conditions. Avoid dust close to ignition sources.
- 10.5 Incompatible materials:** Strong oxidizing substances.
- 10.6 Hazardous decomposition products:** Carbon Dioxide. Carbon Dioxide.

SECTION 11: Toxicological information

11.1 Information on toxicological effects:

Acute toxicity :

Test / Substance	Species	Type / Result	Exposure	Remarks
Cellulose, carboxymethyl ether, sodium salt	Guinea Pig	LD50 - Oral : 16 g/kg		- Literature Reference - Data from similar product.
Cellulose, carboxymethyl ether, sodium salt	Rat	LD50 - Oral : 27 g/kg		- Literature Reference - Data from similar product.

Skin irritation. :

Test / Substance	Species	Result	Exposure	Remarks
Hydroxyethylcellulose	Rabbit	Not Irritating	48 h	- Literature Reference - Data from similar product.

Serious eye irritation :

Test / Substance	Species	Result	Exposure	Remarks
Hydroxyethylcellulose	Rabbit	Not Irritating		- Literature Reference - Data from similar product.

Sensitization :

Test / Substance	Type	Species	Result	Remarks
Hydroxypropylmethylcellulose		Guinea Pig	Non-Sensitising	- Literature Reference - Data from similar product.

Repeated dose toxicity :

Test / Substance	Species	Result	Exposure	Remarks
OECD 408 Cellulose, carboxymethyl ether, sodium salt	Rat	No treatment related effects.	90 day(s)	- Literature Reference - Data from similar product.

Mutagenesis :

Test / Substance	Type	Species	Result	Remarks
Ames Cellulose, carboxymethyl ether, sodium salt		S. typhimurium	Negative	- Literature Reference - Data from similar product.

Carcinogenicity :

Test / Substance	Species	Route of Exposure / Exposure	Result	Remarks
Scientific evaluation. Cellulose, carboxymethyl ether, sodium salt	Rat	Oral 104 Week(s).	Negative	- Literature Reference - Data from similar product.
Scientific evaluation. Methylcellulose	Rat	Subcutaneous	Negative	- Literature Reference - Data from similar product.
Scientific evaluation. Cellulose, carboxymethyl ether, sodium salt	Mouse	Oral 100 Week(s).	Negative	- Literature Reference - Data from similar product.
Scientific evaluation. Cellulose, carboxymethyl ether, sodium salt	Rat	Oral 103 Week(s).	Negative	- Literature Reference - Data from similar product.

Reproductive toxicity :

Test / Substance	Species	Route of Exposure / Exposure	Result	Remarks
Scientific evaluation. Hydroxypropylmethylcellulose	Rat	Oral 28 day(s)	No treatment related effects.	- Literature Reference - Data from similar product.
Scientific evaluation. Methylcellulose	Rat	Oral	No treatment related effects.	- Literature Reference - Data from similar product.

Remarks:

The ingredients of this product are not classified as carcinogenic by the ACGIH, the CIRC, the OSHA or the NTP.

SECTION 12: Ecological information

12.1 Toxicity:

Acute toxicity:

Test / Substance	Species	Type/Result	Exposure	Remarks
Cellulose, carboxymethyl ether, sodium salt	Ceriodaphnia	EC50 : > 100 mg/l	48 h	- Literature Reference -
Cellulose, carboxymethyl ether, sodium salt	Rainbow Trout	LC50 : >20000 mg/l	96 h	- Literature Reference -

Chronic Toxicity:

No data available.

12.2 Persistence and degradability:

Test / Substance	Result	Remarks
OECD 301b Product	73.9 % / The product is readily biodegradable.	- Internal data -

12.3 Bioaccumulative potential:

No data available.

12.4 Mobility in soil:

No data available.

12.5 Results of PBT and vPvB assessment:

No data available.

12.6 Other adverse effects: None known.

SECTION 13: Disposal considerations

13.1 Waste treatment methods:

Product: Dispose of waste in an appropriate authorized treatment facility in accordance with regulations in force and product characteristics at time of disposal. (for example, energy recovery). Dispose of waste in an appropriate authorized treatment facility in accordance with regulations in force and product characteristics at time of disposal. (for example, energy recovery).

Packaging material: Single use packaging. Collect for salvage or disposal. Single use packaging. Collect for salvage or disposal.

SECTION 14: Transport information

This material is not subject to transport regulations (DOT, IMDG, IATA).

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture:

SARA Title III (Superfund Amendments and Reauthorization Act) :

Section: 302 Not Applicable

Section: 311 Not listed

US. NFPA 325 - Guide to Fire Hazard Properties of Flammable Liquids, Gases, and Volatile Solids. :

NFPA Health Rating: 0

NFPA Flammability Rating: 1

NFPA Instability Rating: 0

NFPA Special Hazard: No

US. HMIS Chemical Ratings (Hazardous Materials Information System, Chemical Ratings Guide) :

Health hazard: 0

Flammability hazard: 1

Physical hazard: 0

Personal Protection: F

US. California Safe Drinking Water & Toxic Enforcement Act (Proposition 65) :

Not listed

International Inventories :

Australia. Inventory of Chemical Substances (AICS):	Listed.
China. Inventory of Existing Chemical Substances (IECSC):	Listed.
Japan. Pharmacopoeia Listing:	Listed.
Japan. Industrial Safety & Health Law (ISHL):	Listed.
Japan. Inventory of Existing & New Chemical Substances (ENCS):	Listed.
Mexico. National Inventory of Chemical Substances (INSQ):	Listed.
Korea. Existing Chemicals Inventory (KECI):	Listed.
Philippines. Inventory of Chemicals and Chemical Substances (PICCS):	Listed.
New Zealand. Inventory of Chemicals (NZIoC):	Listed.
Taiwan. Existing Chemicals Inventory (TCSI):	Listed.
US. Toxic Substances Control Act (TSCA):	Listed.
Vietnam. National Chemical Inventory (NCI):	Listed.
Russian Federation. Unified list of chemicals:	Listed.
Thailand. Existing Chemicals Inventory from FDA (TECI):	Not listed

This Safety Data Sheet is in conformity with appendix D of the OSHA Hazard Communication Standard 29CFR 1910.1200.

SECTION 16: Other information

Revision Information: Not relevant.
Last revised date 05/13/2026
Key literature references and sources for data: Literature on components.

Wording of hazard statements and/or precautionary statements from section 2 and 3:

Combustible dusts : May form combustible dust concentrations in air.
Combustible dusts: Combustible dusts

Abbreviations and acronyms used in the SDS.:

CAS: Chemical Abstracts Service (division of the American Chemical Society)
GHS: Globally Harmonized System of Classification and Labelling of Chemicals

Disclaimer:

The information provided in this Safety Data Sheet (SDS) relates only to the specific product designated and may not be applicable when such product is used in combination with other materials or in any process. It is the responsibility of the user to be aware of and to follow the regulations applying to our product for its possession, handling and use.
The information given is designed only as a guidance and is not to be considered a warranty or quality specification.
All information and instructions provided in this SDS are based on the current state of our knowledge at the latest revision date indicated.