SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of: Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008

Revision date 19-Dec-2022 **Revision Number** 1

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

1.1. Product identifier

Product Name **METHOCEL™ J12M S Hydroxypropyl Methylcellulose**

Product Code(s) **16588**

Pure substance/mixture Mixture

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

Recommended use

Thickening agent
Binder
film
Processing aid
We recommend that you use this product in a manner consistent with the listed use. If your intended use is not consistent with the stated use, please contact your sales or technical service representative.

1.3. Details of the supplier of the safety data sheet

Supplier
Nutrition & Biosciences Netherlands B.V.
Willem Einthovenstraat 4
2342 BH Oegstgeest The Netherlands
Tel.: +31 71 5686 168
Fax: +31 71 5686 169

E-mail address sds.genencor@iff.com

1.4. Emergency telephone number

Emergency Telephone See section 16 for more information

Emergency Telephone - §45 - (EC)1272/2008	
Poison control centre phone number	112 (Europe)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008
This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [CLP]

2.2. Label elements

This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [CLP]

EUH208 - Contains Ethanedial May produce an allergic reaction.

2.3. Other hazards

WARNING. May form combustible dust concentrations in air. The components in this formulation do not meet the criteria for classification as PBT or vPvB.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Chemical name	Weight-%	REACH registration number	EC No (EU Index No)	Classification according to Regulation (EC) No. 1272/2008 [CLP]	Specific concentration limit (SCL)	M-Factor	M-Factor (long-term)
Hydroxypropyl methylcellulose 9004-65-3	85 - 90	REACH Exempt	-	-	-	-	-
Ethanedial 107-22-2	0.1 - <1	01-2119461733-37	(605-016-00-7) 203-474-9	Acute Tox. 5 (H303) Acute Tox. 4 (H332) Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) Skin Sens. 1 (H317) Muta. 2 (H341) STOT SE 3 (H335)	-	-	-

Full text of H- and EUH-phrases: see section 16

Acute Toxicity Estimate
If LD50/LC50 data is not available or does not correspond to the classification category, then the appropriate conversion value from CLP Annex I, Table 3.1.2, is used to calculate the acute toxicity estimate (ATEmix) for classifying a mixture based on its components

Chemical name	Oral LD50 mg/kg	Dermal LD50 mg/kg	Inhalation LC50 - 4 hour - dust/mist - mg/L	Inhalation LC50 - 4 hour - vapour - mg/L	Inhalation LC50 - 4 hour - gas - ppm
Ethanedial 107-22-2	200	12700	No data available	= 2.44 mg/L (Rat) 4 h	No data available

SECTION 4: First aid measures

4.1. Description of first aid measures

General advice When in doubt or if symptoms are observed, get medical advice.

Inhalation IF INHALED: Remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTER or doctor.

Eye contact IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Skin contact IF ON SKIN: Wash with plenty of water and soap. If skin irritation occurs: Get medical advice/attention.

Ingestion IF SWALLOWED: Never give anything by mouth 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

Symptoms May cause allergy or asthma symptoms or breathing difficulties if inhaled. Get medical attention if irritation or other symptoms occur.

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

Note to doctors Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable Extinguishing Media Foam. Dry powder. Water spray. Carbon dioxide (CO2).

Unsuitable extinguishing media Keep product and empty container away from heat and sources of ignition. Do not use water jetstream.

5.2. Special hazards arising from the substance or mixture

Specific hazards arising from the chemical Fine dust dispersed in air, in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.

Hazardous combustion products Smoke production.

5.3. Advice for firefighters

Special protective equipment and precautions for fire-fighters Positive pressure self-contained breathing apparatus (SCBA) and structural firefighters' protective clothing will provide adequate protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Dust deposits should not be allowed to accumulate on surfaces, as these may form an explosive mixture if they are released into the atmosphere in sufficient concentration. Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air). Use personal protection recommended in Section 8. Sweep up to prevent slipping hazard.

For emergency responders Use personal protection recommended in Section 8.

6.2. Environmental precautions

Environmental precautions Clean contaminated objects and areas thoroughly observing environmental regulations.

6.3. Methods and material for containment and cleaning up

Methods for containment Sweep up and shovel into suitable containers for disposal. Avoid dust formation. Dispose of in accordance with local regulations.

Methods for cleaning up Use industrial vacuum cleaners approved for combustible dust and area electrical classification.

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

6.4. Reference to other sections

Reference to other sections See section 8 for more information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling Avoid generation of dust and aerosols. Avoid contact with eyes, skin and clothing. Minimise dust generation and accumulation. Combustible dust clouds may be created where operations produce fine material (dust). Avoid significant deposits of material, especially on horizontal surfaces, which may become airborne and form combustible dust clouds and may contribute to secondary explosions. Handling and processing operations should be conducted in accordance with 'best practices' (e.g. NFPA- 654).

General hygiene considerations Handle in accordance with good industrial hygiene and safety practice. Regular cleaning of equipment, work area and clothing is recommended. Avoid contact with eyes, skin and clothing. Wear suitable gloves and eye/face protection.

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions Keep/store only in original container. Keep container tightly closed in a dry and well-ventilated place.

7.3. Specific end use(s)

Specific use(s) See section 1 for more information.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure Limits Based on data available for ingredients

Chemical name	European Union	United Kingdom	France	Spain	Germany TRGS
Ethanedial 107-22-2	-	-	-	TWA: 0.1 mg/m³ Sen+	-
Dust, non-specific	-	-	TWA: 10 mg/m³ TWA: 5 mg/m³	TWA: 10 mg/m³ TWA: 3 mg/m³	-

Chemical name	Italy MDLPS	Portugal	Netherlands	Finland	Denmark
Ethanedial	-	TWA: 0.1 mg/m³	-	TWA: 0.02 mg/m³	Ceiling: 0.2 ppm

Chemical name	Italy MDLPS	Portugal	Netherlands	Finland	Denmark
107-22-2		Sensitizer dermal			Ceiling: 0.5 mg/m³
Dust, non-specific	-	TWA: 10 mg/m³ TWA: 3 mg/m³	-	-	-

Chemical name	Austria	Switzerland	Poland	Norway	Ireland
Ethanedial 107-22-2	-	-	-	-	STEL: 0.3 mg/m³
Dust, non-specific	-	-	-	TWA: 10 mg/m³ TWA: 5 mg/m³ STEL: 20 mg/m³ STEL: 10 mg/m³	TWA: 10 mg/m³ TWA: 4 mg/m³ STEL: 30 mg/m³ STEL: 12 mg/m³

Chemical name	Belgium	Sweden	Croatia	Turkey
Ethanedial 107-22-2	TWA: 0.1 mg/m³	-	-	-
Dust, non-specific	TWA: 3 mg/m³ TWA: 10 mg/m³	-	-	-

8.2. Exposure controls

Engineering controls Ensure adequate ventilation. Avoid generation of dust and aerosols.

Personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles).

Hand protection Wear protective gloves.

Skin and body protection Wear protective gloves and protective clothing.

Respiratory protection If exposure limits are likely to be exceeded or if irritation or other symptoms are experienced, NIOSH/MSHA or EN 136 approved respiratory protection should be worn.

General hygiene considerations Handle in accordance with good industrial hygiene and safety practice. Regular cleaning of equipment, work area and clothing is recommended. Avoid contact with eyes, skin and clothing. Wear suitable gloves and eye/face protection.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance Powder
Physical state Solid
Colour White to off-white mild
Odour No information available
Odour threshold No information available

Property	Values	Remarks • Method
pH	5 - 8	aqueous solution
Melting point / freezing point	No data available	None known
Initial boiling point and boiling range	No data available	None known
Flash point	No data available	CC (closed cup)
Evaporation rate	No data available	None known

Flammability (solid, gas)	No data available	None known
Flammability Limit in Air		Not applicable to Solids
Upper flammability or explosive limits	No data available	
Lower flammability or explosive limits	No data available	
Vapour pressure	No data available	None known
Relative vapour density	No data available	None known
Relative density	No data available	None known
Bulk density	No data available	
Liquid Density	No data available	
Water solubility	No data available	Soluble
Solubility(ies)	No data available	None known
Partition coefficient	No data available	bioconcentration : None known
Autoignition temperature	No data available	Key literature references and sources for data Does not ignite before melting
Decomposition temperature	140 °C	Differential Scanning Calorimetry (DSC) Decomposes on heating
Kinematic viscosity	No data available	None known
Dynamic viscosity	No data available	Solid
Particle characteristics		
Particle Size		Not applicable
Particle Size Distribution		Not applicable

9.2. Other information

Molecular weight > 1000

9.2.1. Information with regards to physical hazard classes

Not applicable

Explosive properties No data available.

9.2.2. Other safety characteristics None known

Sensitivity to mechanical impact No

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity Not expected.

10.2. Chemical stability

Stability Stable under normal conditions.

Explosion data

Sensitivity to mechanical impact No.

Sensitivity to static discharge Yes.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions None under normal processing.

Hazardous polymerisation Hazardous polymerisation does not occur.

10.4. Conditions to avoid

Conditions to avoid Heat, flames and sparks. May form combustible dust concentrations in air.

10.5. Incompatible materials

Incompatible materials Keep away from heat, flames and sparks.

10.6. Hazardous decomposition products

Hazardous decomposition products No hazardous decomposition products known.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Product Information

Acute toxicity

Inhalation No information or data specific to the product on this toxicological (health) effect is available.

Eye contact No information or data specific to the product on this toxicological (health) effect is available.

Skin contact No information or data specific to the product on this toxicological (health) effect is available.

Ingestion No information or data specific to the product on this toxicological (health) effect is available.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms Get medical attention if irritation or other symptoms occur. May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Respiratory or skin sensitisation No information available

Germ cell mutagenicity No information available.

Carcinogenicity No information available.

Reproductive toxicity No information available.

STOT - single exposure No information available.

STOT - repeated exposure No information available.

Aspiration hazard No information available.

Numerical measures of toxicity

Component Information Classification based on data available for ingredients

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Hydroxypropyl methylcellulose	>4000 mg/kg (Rat)	>5000 mg/kg (Rabbit)	-
Ethanedial	= 200 mg/kg (Rat)	= 12700 mg/kg (Rabbit)	= 2.44 mg/L (Rat) 4 h

Hydroxypropyl methylcellulose 9004-65-3

Eye irritation Not expected
Skin irritation Not expected
Respiratory irritation Not expected
Sensitisation Not expected
Reproductive effects Not expected

Mutagenic effects	Not expected
Systemic Toxicity	Not expected
Carcinogenicity	Not expected
Teratogenicity	Not expected

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

Endocrine disrupting properties This product does not contain any known or suspected endocrine disruptors.

11.2.2. Other information

Other adverse effects No information available.

SECTION 12: Ecological information

12.1. Toxicity

Ecotoxicity Based on data available for ingredients.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Ethanedial 107-22-2	EC50: >500mg/L (72h, Desmodesmus subspicatus) EC50: >500mg/L (96h, Desmodesmus subspicatus) EC50: <=348.59mg/L (96h, Pseudokirchneriella subcapitata)	LC50: =215mg/L (96h, Pimephales promelas)	-	EC50: =404mg/L (48h, Daphnia magna)

12.2. Persistence and degradability

Persistence and degradability Based on data available for ingredients.

Chemical name	Biodegradation
Hydroxypropyl methylcellulose 9004-65-3	Slow biodegradation

12.3. Bioaccumulative potential

Bioaccumulative potential Based on data available for ingredients

Chemical name	Bioaccumulation/Accumulation
Hydroxypropyl methylcellulose 9004-65-3	No bioaccumulation potential Molecular weight >1,000

Component Information Based on data available for ingredients

Chemical name	Partition coefficient
Ethanedial 107-22-2	-1

12.4. Mobility in soil

Mobility in soil No information available.

12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment Based on data available for ingredients

Chemical name	PBT and vPvB assessment
Hydroxypropyl methylcellulose 9004-65-3	The substance is not PBT / vPvB
Ethanedial 107-22-2	The substance is not PBT / vPvB

12.6. Endocrine disrupting properties

Endocrine disrupting properties This product does not contain any known or suspected endocrine disruptors.

12.7. Other adverse effects

Other adverse effects No information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste from residues/unused products Dispose of wastes in an approved waste disposal facility. Dispose of contents and container in accordance with local, regional, national, and international regulations as applicable.

Contaminated packaging Dispose of empty containers and wastes safely. Dispose of waste product or used containers according to local regulations.

SECTION 14: Transport information

IATA

14.1 UN number or ID number Not regulated
14.2 Extended Proper Shipping Name Not regulated
14.3 Transport hazard class(es) Not regulated
14.4 Packing group Not regulated
14.5 Environmental hazards Not applicable
14.6 Special Precautions for Users
Special Provisions None

IMDG

14.1 UN number or ID number Not regulated
14.2 EPNM Not regulated
14.3 Transport hazard class(es) Not regulated
14.4 Packing group Not regulated
14.5 Environmental hazards Not applicable
14.6 Special Precautions for Users
Special Provisions None
14.7 Maritime transport in bulk No information available

according to IMO instruments

RID

14.1 UN number	Not regulated
14.2 Extended Proper Shipping Name	Not regulated
14.3 Transport hazard class(es)	Not regulated
14.4 Packing group	Not regulated
14.5 Environmental hazards	Not applicable
14.6 Special Precautions for Users	
Special Provisions	None

ADR

14.1 UN number or ID number	Not regulated
14.2 UN proper shipping name	Not regulated
14.3 Transport hazard class(es)	Not regulated
14.4 Packing group	Not regulated
14.5 Environmental hazards	Not applicable
14.6 Special Precautions for Users	
Special Provisions	None

SECTION 15: Regulatory information

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

National regulations

France Occupational Illnesses (R-463-3, France) Based on data available for ingredients

Water hazard class (WGK) Based on data available for ingredients

Mixture Based on data available for ingredients

Chemical name	CAS No	WGK Classification (AwSV)
Hydroxypropyl methylcellulose	9004-65-3	Klasse (class) 1
Ethanedial	107-22-2	Klasse (class) 1

Authorisations and/or restrictions on use:
This product does not contain substances subject to authorisation (Regulation (EC) No. 1907/2006 (REACH), Annex XIV). This product does not contain substances subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII).

International Inventories: Based on data available for ingredients

Chemical name	AICS	DSL/NDSL	EINECS/ELINCS	ENCS	IECSC	KECL	PICCS
Hydroxypropyl methylcellulose 9004-65-3	X	X	-	X	X	X	X
Ethanedial 107-22-2	X	X	X	X	X	X	X

15.2. Chemical safety assessment

Chemical Safety Report No information available

SECTION 16: Other information

Legend
TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances

Further information

ATEX Directive 1999/92/EC, Workplace Requirements for Explosive Atmospheres
ATEX Directive 94/9/EC, Equipment for use in Explosive Atmospheres

Telephone enquiry:
CHEMTREC NUMBERS
Belgium: 32-28083237: 359-32570104: 385-17776920Republic: 420-228880039 : 45-69918573: 372-6681294: 358-942419014: 33-975181407: 0800-181-7059: 30-2111768478: 36-18088425: 354 539 0655: 000-800-100-7141 : 353-19014670: 972-37630639: 39-0245557031: 371-66165504: 370-52140238 : 352-20202416: 389 2 551 7456 : 01-800-681-9531 : 31-858880596 : 234 1 227 8883 : 48-223988029 : 351-308801773: 40-37-6300026: 8-800-100-6346 Arabia: 966-8111095861 : 421-233057972: 38-618888016Africa: 0-800-983-611: 34-931768545: 46-852503403: 41-435082011: 90-212-7055340: 380-947101374 Kingdom: 44-870-8200418 and 44-2038073798

Revision date 19-Dec-2022

Reason for revision ***Indicates updated section

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

Disclaimer
The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet