

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 02-Oct-2023

Revision Number 4

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

1.1. Product identifier

Product Name METHOCEL™ F4M Hydroxypropyl Methylcellulose

Product Code(s) 16540

Pure substance/mixture Substance***

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

Recommended use Industrial***

Uses advised against None under normal use conditions

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

See section 16 for more information

| Emergency Telephone - §45 - (EC) | 1272/2008 |
|----------------------------------|--|
| Poison control centre phone | Italy: |
| number | Telephone numbers of the main poison control centers (CAV) active 24/24h: |
| | CAV "Osp. Pediatrico Bambino Gesù", Piazza Sant'Onofrio 4, 00165 Roma, Tel. 0668593726 |
| | Az. Osp. Univ. Foggia, Via le Luigi Pinto 1, 71122 Foggia, Tel. 800183459 |
| | Az. Osp. "A. Cardarelli", Via A. Cardarelli 9, 80131 Napoli, Tel. 081-5453333 CAV Policlinico "Umberto I", Via le del Policlinico 155, 00161 Roma, Tel. 06-49978000 CAV Policlinico "A. Gemelli" Largo Agostino Gemelli 8, 00168 Roma, Tel. 06-3054343 Az. Osp. "Careggi" U.O. Tossicologia Medica, Largo Brambilla 3, 50134 Firenze, Tel. 055-7947819 |
| | CAV Centro Nazionale di Informazione Tossicologica, Via Salvatore Maugeri 10, 27100 Pavia, Tel. 0382-24444 |
| | Osp. Niguarda Ca' Granda, Piazza Ospedale Maggiore 3, 20162 Milano, Tel. 02-66101029 Azienda Ospedaliera Papa Giovanni XXII, Piazza OMS 1, 24127 Bergamo, Tel. 800883300 Azienda Ospedaliera Integrata Verona, Piazzale Aristide Stefani 1, 37126 Verona, Tel. 800011858 |
| | Austria: +43 (0) 14064343 Belgium: +32 (0) 70245245 |

| Bulgaria: +359 2 9154 233 |
|---|
| Croatia: +3851 2348 342 |
| Cyprus: 1401 (only from within Cyprus) |
| Czech Republic: +420 224 919 293 |
| Denmark: +45 8212 1212 |
| Estonia: +372 7943 794 |
| Finland: +0800 147 111 (only from within Finland) |
| France: + 33 (0)1 45 42 59 59 |
| Germany: +49 (0) 55119240 |
| Greece: +30 2107793777 |
| Hungary: +36-80-201-199 |
| Iceland: +543 1000 (only from within Iceland) |
| Ireland: +353 (0) 18379964 |
| Latvia: +371 67042473 |
| Liechtenstein: +41 442 515 151 |
| Lithuania: +370 (85) 2362052 |
| Luxembourg: (+352) 8002 5500 |
| Malta: +2122 4071 (only from within Malta) |
| the Netherlands: +31 (0)88 755 8000 (only for medical professionals) |
| Norway: +22 59 13 00 (only from within Norway) |
| Poland: +48 (22) 6 19 08 97 |
| Portugal: +351 800 250 250 |
| Romania: +40213183606 |
| Slovakia: +421 2 5477 4166 |
| Slovenia: +386 (0) 1 522 50 50 |
| Spain: +34 91 562 04 20 |
| Sweden: +010-456 6700 (only from within Sweden for less urgent cases; urgent cases: |
| 112) |
| Switzerland: +41 442 515 151 |

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture Regulation (EC) No 1272/2008

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

2.2. Label elements

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

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

3.1 Substances

3.2 Mixtures Not applicable

| 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 | 95 - 100 | REACH Exempt | 618-389-6*** | Not classified*** | - | _ | - |

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 - vapour - mg/L | |
|--|------------------|---------------------------|-------------------|---|-------------------|
| Hydroxypropyl methylcellulose*** 9004-65-3 | >4000 mg/kg(Rat) | >5000 mg/kg (Rabbit) | No data available | No data available | 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 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 | e 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). Sweep up to prevent slipping hazard. Use personal protection recommended in Section 8.*** | | | | |
|---|--|--|--|--|--|
| 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.*** | | | | | |
| 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 |
|-------------------------|--|
| | contribute to secondary explosions. Handling and processing operations should be |

| Specific use(s) | See section 1 for more information. |
|---------------------------------------|---|
| 7.3. Specific end use(s) | |
| Storage Conditions | Keep/store only in original container. Keep container tightly closed in a dry and well-ventilated place.*** |
| 7.2. Conditions for safe storage, inc | luding any incompatibilities |
| 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.*** |
| | conducted in accordance with 'best practices' (e.g. NFPA- 654).*** |

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 |
|--------------------|----------------|----------------|---------------------------|---------------------------|--------------|
| Dust, non-specific | - | - | TWA: 10 mg/m ³ | TWA: 10 mg/m ³ | - |
| - | | | TWA: 5 mg/m ³ | TWA: 3 mg/m ³ | |

| Chemical name | Italy MDLPS | Portugal | Netherlands | Finland | Denmark |
|--------------------|-------------|---------------------------|-------------|---------|---------|
| Dust, non-specific | - | TWA: 10 mg/m ³ | - | - | - |
| | | TWA: 3 mg/m ³ | | | |

| Chemical name | Austria | Switzerland | Poland | Norway | Ireland |
|--------------------|---------|-------------|--------|---|---|
| Dust, non-specific | - | - | - | TWA: 10 mg/m ³ TWA: 5 mg/m ³ STEL: 20 mg/m ³ STEL: 10 mg/m ³ | TWA: 10 mg/m ³ TWA: 4 mg/m ³ STEL: 30 mg/m ³ STEL: 12 mg/m ³ |

| Chemical name | Belgium | Sweden | Croatia | Turkey | Greece |
|--------------------|---|--------|---------|--------|--------|
| Dust, non-specific | TWA: 3 mg/m ³ TWA: 10 mg/m ³ | - | - | - | - |

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.*** | |
| <i></i> | | |
| 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 conside | erations |
|-------------------------|----------|
|-------------------------|----------|

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 a | and chemical properties | |
|--|-----------------------------|---|
| Appearance | Powder | |
| Physical state | Solid | |
| Colour | White to off-white | |
| Odour | Odourless | |
| Odour threshold | No information available | |
| ouour infestiona | No information available | |
| Property_ | Values | Remarks • Method |
| рН | 5 - 8 | aqueous solution |
| Melting point / freezing point | No data available | None known |
| Initial boiling point and boiling rang | je 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 | May form combustible dust concentrations in air |
| 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 | partly soluble |
| Solubility(ies) | No data available | None known |
| Partition coefficient | No data available | bioconcentration : None known |
| | No data available | Key literature references and sources for data Does |
| Autoignition temperature | NO Udla avaliable | |
| Decomposition to manufacture | 140 | not ignite before melting |
| Decomposition temperature | 140 | Differential Scanning Calorimetry (DSC) |
| Kinemetie vie eesity | Ne dete evelleble | Decomposes on heating |
| Kinematic viscosity | No data available | None known |
| Dynamic viscosity | No data available | Solid |
| Particle characteristics | | Natanaliashia |
| Particle Size | | Not applicable |
| Particle Size Distribution | | Not applicable |
| 9.2. Other information | | |
| Softening point | No data available | |
| Molecular weight | > 1000 | |
| - | | |
| 9.2.1. Information with regards to p | hysical 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 impac Sensitivity to static discharge | t No.*** 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.*** | |
| 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 | >4000 mg/kg(Rat) | >5000 mg/kg(Rabbit) | - |
| methylcellulose*** | | | |

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.***

12.2. Persistence and degradability

Persistence and degradability Based on data available for ingredients.***

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

12.3. Bioaccumulative potential

Bioaccumulative potential

Based on data available for ingredients

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

Component Information

Based on data available for ingredients

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*** | The substance is not PBT / vPvB |
| 9004-65-3 | |

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

| IA1 | ГΑ |
|-----|----|
| | |

| ΙΑΤΑ | _ | | | |
|----------------------|---|--------------------------------|--|--|
| 14.1 | UN number or ID number | Not regulated | | |
| 14.2 | Extended Proper Shipping | Not regulated | | |
| Name | 9 | | | |
| 14.3 | Transport hazard class(es) | Not regulated | | |
| 14.4 | Packing group | Not regulated | | |
| 14.5 | | Not applicable | | |
| 14.6 | | | | |
| S | pecial Provisions | None | | |
| | • | | | |
| IMDG | ì | | | |
| 14.1 | | Not regulated | | |
| 14.2 | EPNM | Not regulated | | |
| 14.3 | Transport hazard class(es) | Not regulated | | |
| 14.4 | | Not regulated | | |
| 14.5 | Environmental hazards | Not applicable | | |
| 14.6 | Special Precautions for Users | | | |
| | pecial Provisions | None | | |
| 14.7 | • | No information available | | |
| | rding to IMO instruments | | | |
| | 5 | | | |
| RID | | | | |
| 14.1 | UN number | Not regulated | | |
| 14.2 | Extended Proper Shipping | Not regulated | | |
| Name | | 0 | | |
| 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 | | | |
| S | pecial Provisions | None | | |
| | - | | | |
| ADR | | | | |
| 14.1 | UN number or ID number | Not regulated | | |
| 14.2 | UN proper shipping name | Not regulated | | |
| | en propor empping name | notrogalatoa | | |
| 14.3 | Transport hazard class(es) | Not regulated | | |
| 14.3 14.4 | | | | |
| 14.4 14.5 | Transport hazard class(es) Packing group Environmental hazards | Not regulated | | |
| 14.4 14.5 14.6 | Transport hazard class(es) Packing group Environmental hazards Special Precautions for Users | Not regulated Not regulated | | |
| 14.4 14.5 14.6 | Transport hazard class(es) Packing group Environmental hazards | Not regulated Not regulated | | |

SECTION 15: Regulatory information

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

International Inventories: Based on data available for ingredients

| Chemical name | AICS | DSL/NDSL | EINECS/ELIN CS | ENCS | IECSC | KECL | PICCS |
|--|------|----------|-------------------|------|-------|------|-------|
| Hydroxypropyl methylcellulose*** 9004-65-3 | Х | Х | - | Х | Х | Х | Х |

National regulations

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

| Chemical name | CAS No | WGK Classification (AwSV) |
|----------------------------------|-----------|---------------------------|
| Hydroxypropyl methylcellulose*** | 9004-65-3 | Klasse (class) 1 |

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

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).

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 | 02-Oct-2023 | | | | |
| 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