



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 10-Jul-2023

Revision Number 2

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

1.1. Product identifier

Product Name ETHOCEL™ Standard 4 Ethylcellulose Industrial Grade

Product Code(s) 47282

Pure substance/mixture Substance

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

Recommended use Industrial***

Uses advised against No information available***

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 number	Italy: 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
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	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
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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)
Ethylcellulose 9004-57-3	95 - 100	No data available		-	-	-	-

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
Ethylcellulose 9004-57-3	>5000mg/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.***
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4.3. Indication of any immediate medical attention and special treatment needed

Note to doctors	Treat symptomatically.
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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.

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

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 light yellow
Odour	Odourless to mild
Odour threshold	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	No data available	None known
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	May form combustible dust concentrations in air
Flammability Limit in Air		None known
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	Insoluble
Solubility(ies)	No data available	None known
Partition coefficient	No data available	bioconcentration : None known
Autoignition temperature	No data available	No data available
Decomposition temperature		None known
Kinematic viscosity	No data available	None known
Dynamic viscosity	No data available	None known
Particle characteristics		
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 physical hazard classes

Not applicable	
Explosive properties	No data available.***

9.2.2. Other safety characteristics

Sensitivity to mechanical impact	No***
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SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	Not expected.***
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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.***

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
Ethylcellulose	>5000mg/kg (Rat)	>5000 mg/kg (Rabbit)	-

Ethylcellulose 9004-57-3

Eye irritation	Not expected
Skin irritation	Not expected
Respiratory irritation	Not expected
Sensitisation	Not expected
Reproductive effects	NOAEL (No observed adverse effect level) 1,309 mg/kg Rat
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
Ethylcellulose 9004-57-3	Not readily biodegradable

12.3. Bioaccumulative potential

Bioaccumulative potential Based on data available for ingredients

Chemical name	Bioaccumulation/Accumulation
Ethylcellulose 9004-57-3	No bioaccumulation potential 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
Ethylcellulose 9004-57-3	The substance is not PBT / vPvB

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 according to IMO instruments	No information available

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

International Inventories: Based on data available for ingredients

Chemical name	AICS	DSL/NDSL	EINECS/ELINCS	ENCS	IECSC	KECL	PICCS
Ethylcellulose 9004-57-3	X***	X***	-	X***	X***	X***	X***

National regulations

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

Chemical name	CAS No	WGK Classification (AwSV)
Ethylcellulose	9004-57-3	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/NDL - 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: 385-17776920 Republic: 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: 38-618888016 Africa: 0-800-983-611: 34-931768545: 46-852503403:
 41-435082011: 90-212-7055340: 380-947101374 Kingdom: 44-870-8200418 and
 44-2038073798

Revision date 10-Jul-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