

SAFETY DATA SHEET

HECELLOSE® HYDROXYETHYL CELLULOSE HEC

According to Regulation (EC) No 1907/2006, Annex II, as amended by Regulation (EU) No 453/2010, COMMISSION REGULATION (EU) 2015/830 of 28 May 2015.

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

1.1. Product identifier

Product name HECCELLOSE® HYDROXYETHYL CELLULOSE HEC

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

Identified uses Paint. Thickener. Personal care product. Construction additive.

1.3. Details of the supplier of the safety data sheet

Supplier (Only Representative of LOTTE Fine Chemical Co.,Ltd.)
KIST Europe, Campus E71
Universitaet des Saarlandes
66123, Saarbruecken
Germany
Tel: +49 681 9382 334
Fax: +49 681 9382 319
reach.it@kist-europe.de

Manufacturer LOTTE Fine Chemical Co.,Ltd.
Yeocheon-ro 19, 217 beon-gil,
Nam-gu, Ulsan,
44714, South Korea
Tel: +82-52-270-6119
sds.lotte-cellulose@lottechem.com

1.4. Emergency telephone number

Emergency telephone +49 551 19240
GIZ-Nord, Goettingen, Germany (English only)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC/1272/2008)

Physical hazards Not Classified

Health hazards Not Classified

Environmental hazards Not Classified

Physicochemical Dust may form explosive mixture with air.

2.2. Label elements

Hazard statements EUH208 Contains GLYOXAL 40%. May produce an allergic reaction.

2.3. Other hazards

This product does not contain any substances classified as PBT or vPvB.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

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HECELLOSE	> 98%
CAS number: 9004-62-0	
Classification	
Not Classified	
GLYOXAL 40%	<1%
CAS number: 107-22-2 EC number: 203-474-9	
Classification	
Acute Tox. 4 - H332	
Skin Irrit. 2 - H315	
Eye Irrit. 2 - H319	
Skin Sens. 1 - H317	
Muta. 2 - H341	

The full text for all hazard statements is displayed in Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information	Get medical attention if any discomfort continues.
Inhalation	Move affected person to fresh air at once. For breathing difficulties, oxygen may be necessary. Keep affected person warm and at rest. Get medical attention immediately. Get medical attention if any discomfort continues.
Ingestion	Ingestion of large amounts may be harmful. Get medical attention promptly if symptoms occur after washing.
Skin contact	Remove contaminated clothing immediately and wash skin with soap and water. Continue to rinse for at least 15 minutes.
Eye contact	Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes.

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

General information	Get medical attention promptly if symptoms occur after washing.
Inhalation	Repeated exposure may cause chronic upper respiratory irritation. Irritation of nose, throat and airway.
Ingestion	Ingestion of large amounts may be harmful.
Skin contact	Skin irritation.
Eye contact	May cause temporary eye irritation. Prolonged contact may cause redness and/or tearing. Conjunctivitis, irritation, tearing.

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

Notes for the doctor	No specific recommendations. Treat symptomatically.
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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media Water spray, foam, dry powder or carbon dioxide.

5.2. Special hazards arising from the substance or mixture

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Hazardous combustion products Thermal decomposition or combustion products may include the following substances: Aldehydes. Carbon dioxide (CO₂). Carbon monoxide (CO). Acrid smoke or fumes.

5.3. Advice for firefighters

Protective actions during firefighting Avoid generation and spreading of dust. Dust may form explosive mixture with air. Avoid dust close to ignition sources. Move containers from fire area if it can be done without risk. Cool containers exposed to flames with water until well after the fire is out. Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Do not scatter spilled material with more water than needed to fight the fire. Evacuate area.

Special protective equipment for firefighters Wear chemical protective suit. Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Avoid contact with skin and eyes. Avoid inhalation of dust and vapours. Take care as floors and other surfaces may become slippery. For personal protection, see Section 8. Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots, clothing or apron, as appropriate.

6.2. Environmental precautions

Environmental precautions Avoid release to the environment. Avoid the spillage or runoff entering drains, sewers or watercourses. Avoid discharge into drains or watercourses or onto the ground.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Avoid generation and spreading of dust. Provide adequate ventilation. Wash thoroughly after dealing with a spillage. Collect and place in suitable waste disposal containers and seal securely.

6.4. Reference to other sections

Reference to other sections For waste disposal, see section 13. For personal protection, see Section 8.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Provide adequate ventilation. Avoid breathing dust. Follow precautions for safe handling described in this safety data sheet. Eliminate all sources of ignition. No smoking, sparks, flames or other sources of ignition near spillage. Earth container and transfer equipment to eliminate sparks from static electricity. Avoid handling which leads to dust formation. Dust may form explosive mixture with air.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Store in tightly-closed, original container in a dry, cool and well-ventilated place. Keep away from heat, sparks and open flame. Dust may form explosive mixture with air. Protect from moisture.

Storage class Dust may form explosive mixture with air. Lower Explosion Limit: 30 g/m³

7.3. Specific end use(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure Controls/personal protection

8.1. Control parameters

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DNEL Not available.

PNEC Not available.

8.2. Exposure controls

Protective equipment



Appropriate engineering controls

Use mechanical ventilation if there is a risk of handling causing formation of airborne dust. Earth container and transfer equipment to eliminate sparks from static electricity.

Eye/face protection

The following protection should be worn: Chemical splash goggles. Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. Unless the assessment indicates a higher degree of protection is required, the following protection should be worn: Tight-fitting safety glasses.

Hand protection

Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. Nitrile rubber. Rubber (natural, latex). Neoprene. Polyvinyl chloride (PVC).

Other skin and body protection

Wear apron or protective clothing in case of contact.

Hygiene measures

Provide eyewash station. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep away from food and drink. Wash hands at the end of each work shift and before eating, smoking and using the toilet. Wash hands thoroughly after handling.

Respiratory protection

Wear a respirator fitted with the following cartridge: Dust, mist and fume filter. Use engineering controls to reduce air contamination to permissible exposure level.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance	Powder.
Colour	White/off-white.
Odour	Odourless.
pH	pH (diluted solution): 4~9 (1% aqueous solution)
Melting point	Not relevant.
Initial boiling point and range	Not relevant.
Flash point	120°C
Evaporation rate	Not relevant.
Flammability (solid, gas)	May form combustible dust concentrations in air.
Upper/lower flammability or explosive limits	Lower flammable/explosive limit: 30 g/m ³ Upper flammable/explosive limit: Not available.
Vapour pressure	Not relevant.
Vapour density	Not relevant.
Bulk density	300-700 kg/m ³

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Solubility(ies)	Completely soluble in water.
Partition coefficient	Not available.
Auto-ignition temperature	460°C
Decomposition Temperature	Not available.
Viscosity	Check product specification
Explosive properties	Dust may form explosive mixture with air.

9.2. Other information

Other information	Specific gravity: 1.53
Molecular weight	> 2000 g/mol

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	No data available.
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10.2. Chemical stability

Stability	Stable at normal ambient temperatures and when used as recommended.
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10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	Not available.
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10.4. Conditions to avoid

Conditions to avoid	Avoid heat, flames and other sources of ignition. Moisture.
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10.5. Incompatible materials

Materials to avoid	Oxidising materials.
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10.6. Hazardous decomposition products

Hazardous decomposition products	Heating may generate the following products: Oxides of carbon. Toxic and corrosive gases or vapours.
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SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral

Notes (oral LD₅₀)	Not available.
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Acute toxicity - dermal

Notes (dermal LD₅₀)	Not available.
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Acute toxicity - inhalation

Notes (inhalation LC₅₀)	Not available.
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Skin corrosion/irritation

Human skin model test	Not available.
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Extreme pH

Not available.

Serious eye damage/irritation

Serious eye damage/irritation	Not available.
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Germ cell mutagenicity

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Genotoxicity - in vitro Not available.

Carcinogenicity

Carcinogenicity Not available.

IARC carcinogenicity Not listed.

Reproductive toxicity

Reproductive toxicity - fertility Not available.

Reproductive toxicity - development Not available.

Specific target organ toxicity - single exposure

STOT - single exposure Not available.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure Not available.

Aspiration hazard

Aspiration hazard Not available.

SECTION 12: Ecological Information

Ecotoxicity There are no data on the ecotoxicity of this product.

12.1. Toxicity

Acute toxicity - fish Not available.

Acute toxicity - aquatic invertebrates Not available.

Acute toxicity - aquatic plants Not available.

Acute toxicity - microorganisms Not available.

Acute toxicity - terrestrial Not available.

Chronic toxicity - fish early life stage Not available.

Short term toxicity - embryo and sac fry stages Not available.

12.2. Persistence and degradability

Persistence and degradability Not available. No data available.

12.3. Bioaccumulative potential

Bioaccumulative potential No data available on bioaccumulation.

Partition coefficient Not available.

12.4. Mobility in soil

Mobility Not available.

Adsorption/desorption coefficient Not available.

Henry's law constant Not available.

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Surface tension Not available.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment This product does not contain any substances classified as PBT or vPvB.

12.6. Other adverse effects

Other adverse effects Not available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information Avoid the spillage or runoff entering drains, sewers or watercourses. Dispose of waste via a licensed waste disposal contractor. Waste material and any included combustible absorbent and containers should be suitable for incineration at an approved facility.

Disposal methods Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority. Confirm disposal procedures with environmental engineer and local regulations.

SECTION 14: Transport information

General The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).

14.1. UN number

Not applicable.

14.2. UN proper shipping name

Not applicable.

14.3. Transport hazard class(es)

Not applicable.

14.4. Packing group

Not applicable.

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

No.

14.6. Special precautions for user

Not applicable.

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

SECTION 15: Regulatory information

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

Authorisations (Title VII Regulation 1907/2006) No specific authorisations are known for this product.

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Restrictions (Title VIII Regulation 1907/2006) No specific restrictions on use are known for this product.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

Abbreviations and acronyms used in the safety data sheet	HEC : hydroxyethylcellulose.
Classification procedures according to Regulation (EC) 1272/2008	Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended).
Issued by	KIST Europe
Revision date	01/07/2018
Revision	5
SDS status	Approved.
Hazard statements in full	H315 Causes skin irritation. H317 May cause an allergic skin reaction. H319 Causes serious eye irritation. H332 Harmful if inhaled. H341 Suspected of causing genetic defects. EUH208 Contains GLYOXAL 40%. May produce an allergic reaction.

This 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. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.