SAFETY DATA SHEET

HCS-2012 APPENDIX D TO §1910.1200

Version 6 **Issue Date** 16-Mar-2013
Product Name Hydroxyethyl Cellulose **Revision date** 12-Apr-2019

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product identifier

Product Name	Hydroxyethyl Cellulose

Other means of identification

Synonyms	No information available.

Recommended use of the chemical and restrictions on use

Recommended Use	Viscosity Modifier
Uses advised against	No information available.

Details of the supplier of the safety data sheet

Supplier	Sidere Technology, Inc.
Address	4690 World Houston Pkwy, Houston TX USA
Postal Code	77032
Phone	+1 832 631 6345
E-mail	support@sideretech.com

2. HAZARDS IDENTIFICATION

GHS Classification

Not classified

Label elements

Pictograms	None
Signal word	None
Hazard Statements	Not applicable
Precautionary Statements	
Prevention	No information available
Response	No information available
Storage	No information available
Disposal	No information available

Hazards not otherwise classified (HNOC)

No information available.

Unknown acute toxicity

No information available.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature Mixture

Chemical Name	CAS No	Weight-%
Cellulose, 2-hydroxyethyl ether	9004-62-0	70 - 100

4. FIRST AID MEASURES

Description of first aid measures

General advice — In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

Inhalation — IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell.

Skin Contact — Wash off with plenty of water. If skin irritation persists, call a physician.

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.

Ingestion — Rinse mouth. Get medical attention. Never give anything by mouth to an unconscious person.

Most important symptoms and effects, both acute and delayed

No information available.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Extinguishing media

Suitable extinguishing media — Water spray, dry chemical, CO_2.

Unsuitable extinguishing media — High volume water jet.

Specific hazards arising from the chemical

Thermal decomposition can lead to release of irritating and toxic gases and vapors, such as carbon monoxide, carbon dioxide.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Cool containers with flooding quantities of water until well after fire is out. Evacuate personnel to safe areas.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Evacuate personnel to safe areas. Keep away from heat, sparks, flame and other sources of ignition. Ensure adequate ventilation, especially in confined areas. Avoid contact with eyes. Avoid generation of dust. Do not breathe dust. Do not eat, drink or smoke when using this product. Wash thoroughly after handling.

Methods and material for containment and cleaning up

Prevent entry into waterways, sewers, basements or confined areas.

Sweep up and transfer to properly labeled containers.

7. HANDLING AND STORAGE

Precautions for safe handling

Handle in accordance with good industrial hygiene and safety practice. Do not handle until all safety precautions have been read and understood. Keep away from heat, sparks, flame and other sources of ignition. Ensure adequate ventilation, especially in confined areas. Avoid contact with eyes. Avoid generation of dust. Do not breathe dust. Do not eat, drink or smoke when using this product. Wash thoroughly after handling.

Conditions for safe storage, including any incompatibilities

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat, sparks, flame and other sources of ignition. Keep away from strong oxidizing agents. Keep locked up and out of reach of children. Keep away from food, drink and animal feeding stuffs. Store in accordance with local regulations.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Limits

No data available.

Appropriate engineering controls

Ensure adequate ventilation, especially in confined areas. Remove all sources of ignition.

Individual protection measures, such as personal protective equipment

Respiratory protection	If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.
Hand Protection	Wear protective gloves.
Eye/face protection	Wear chemical safety goggles.
Skin and body protection	No special technical protective measures are necessary.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Powder
Color	Faintly beige
Odor	Not determined
Odor Threshold	Not determined
pH	Not determined
Melting point/freezing point	Not determined
Boiling point/boiling range	Not determined
Flash point	Not determined
Evaporation rate	Not determined
Flammability (solid, gas)	Not flammable
Flammability Limit in Air	Not determined
Vapor Pressure	Not determined

Vapor density	Not determined
Relative density	Not determined
Density	Not determined
Solubility(ies)	Not determined
Partition coefficient (LogPow)	Not determined
Autoignition temperature	Not determined
Decomposition temperature	Not determined
Kinematic viscosity	Not determined
Dynamic viscosity	Not determined
Explosive properties	Not an explosive
Oxidizing properties	No oxidation

Other information

No information available.

10. STABILITY AND REACTIVITY

Reactivity

No known effects under normal use conditions.

Chemical stability

Stable under normal conditions.

Possibility of Hazardous Reactions

None under normal processing.

Conditions to avoid

Heat, flames and sparks. High temperature (> 200 °C). Moisture. Incompatible materials.

Incompatible materials

Strong acids.

Hazardous Decomposition Products

Carbon monoxide, carbon dioxide.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Inhalation	No known effect based on information supplied.
Eye contact	No eye irritation.
Skin Contact	Non-irritating to the skin.
Ingestion	No known effect based on information supplied.

Information on toxicological effects

Acute toxicity

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Cellulose, 2-hydroxyethyl ether (CAS #: 9004-62-0)	> 8700 mg/kg (Rat)	-	-

Skin corrosion/irritation
Non-irritating to the skin.

Serious eye damage/eye irritation
No eye irritation.

Sensitization
Did not cause allergic skin reactions when tested in humans.

Germ cell mutagenicity
Similar cellulosics were negative in both in vitro and animal genetic toxicity studies.

Carcinogenicity
Similar cellulosics did not cause cancer in long-term animal studies.

Reproductive toxicity
Similar cellulosics did not cause birth defects or other toxic effects to the fetus in laboratory animal studies.
In animal studies, a similar cellulosic has been shown not to interfere with reproduction.

STOT - single exposure
No information available.

STOT - repeated exposure
Based on available data, repeated exposures are not anticipated to cause significant adverse effects.

Aspiration hazard
No information available.

12. ECOLOGICAL INFORMATION

Ecotoxicity
LC50/EC50/EL50/LL50 > 100 mg/L.
IC50 Bacteria, 16 h: > 1000 mg/L.

Persistence and degradability
For the minor component(s) Material is readily biodegradable. Passes OECD test(s) for ready biodegradability.

Bioaccumulative potential
Bioconcentration potential is low (BCF less than 100 or log Pow greater than 7).

Mobility in soil
For the major component(s):
Expected to be relatively immobile in soil (Koc > 5000).
For the minor component(s):
Potential for mobility in soil is very high (Koc between 0 and 50).

Other adverse effects

No information available.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal of wastes	Disposal should be in accordance with applicable regional, national and local laws and regulations.
Contaminated packaging	Disposal should be in accordance with applicable regional, national and local laws and regulations.

14. TRANSPORT INFORMATION

UN/ID No.	Not regulated
UN Proper shipping name	Not regulated
Hazard Class	Not regulated
Packing Group	Not regulated
Special precautions	No information available
Marine pollutant	Non-marine pollutant

15. REGULATORY INFORMATION

International Inventories

Component	AICS	DSL/NDSL	EINECS/ELINCS	ENCS	IECSC	KECL	PICCS	TSCA
Cellulose, 2-hydroxyethyl ether 9004-62-0 (70 - 100)	X	DSL	-	X	X	X	X	X

"-" Not Listed
"X" Listed

US Federal Regulations

SARA 313
Not applicable.

SARA 311/312 Hazard Categories
Not applicable.

CWA (Clean Water Act)
Not applicable.

CERCLA
Not applicable.

US State Regulations

California Proposition 65
This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

This product does not contain any substances regulated under applicable state right-to-know regulations.

16. OTHER INFORMATION

Revision Note

Issue Date	16-Mar-2013
Revision date	12-Apr-2019
Revision Note	Not applicable

Key or legend to abbreviations and acronyms used in the safety data sheet

TWA - TWA (time-weighted average)
STEL - STEL (Short Term Exposure Limit)
Ceiling - Maximum limit value
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

Key literature references and sources for data

ECHA: http://echa.europa.eu/
IFA GESTIS: http://gestis-en.itrust.de/nxt/gateway.dll?f=templates$fn=default.htm$vid=gestiseng:sdbeng
HSDB: http://toxnet.nlm.nih.gov/newtoxnet/hsdb.htm
ICSC: http://www.ilo.org/dyn/icsc/showcard.home
eChemPortal: http://www.echemportal.org/echemportal/index?pageID=0&request_locale=en
NITE-CHRIP: http://www.nite.go.jp/en/chem/chrip/chrip_search/srhInput

Disclaimer

The information provided in this Material 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 --------