



SAFETY DATA SHEET

Preparation Date: 1/22/2015 Revision Date: 6/13/2018 Revision Number: G3

1. IDENTIFICATION

Product identifier

Product code: CA194

Product Name: CARBOXYMETHYLCELLULOSE SODIUM, HIGH VISCOSITY, VISCOSITY OF 1

PERCENT AQUEOUS SOLUTION @ 25 DEG C: 1500-3000 CPS, USP

Other means of identification

Synonyms: Carmellose Sodium

Cellulose, Carboxymethyl Ether, Sodium Salt

Sodium Carboxymethylcellulose Carboxymethylcellulose, sodium salt

Cellulose sodium glycolate

Cellulose glycolic acid, sodium salt

Sodium CMC;

Sodium CM-cellulose; Sodium celluose glycolate; Sodium glycolate cellulose;

Sodium salt of carboxymethylcellulose

Aquaplast; Carmethose; Cellofas; Cellpro; CMC sodium salt; Collowel; Ethoxose;

Lovosa; NaCm-cellulose salt; Tylose C

CAS #: 9004-32-4
RTECS # FJ5950000
CI#: Not available

Recommended use of the chemical and restrictions on use

Recommended use:
Uses advised against

No information available.
No information available

Supplier: Spectrum Chemical Mfg. Corp

14422 South San Pedro St. Gardena, CA 90248

(310) 516-8000

Order Online At: https://www.spectrumchemical.com

Emergency telephone numberChemtrec 1-800-424-9300Contact Person:Martin LaBenz (West Coast)Contact Person:Ibad Tirmiz (East Coast)

2. HAZARDS IDENTIFICATION

Classification

Product code: CA194 Product name: 1/12

This chemical is considered hazardous according to the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Not a dangerous substance or mixture according to the Globally Harmonized System (GHS)

Combustible dust -

Label elements

Warning

May form combustible dust concentrations in air

Hazards not otherwise classified (HNOC)

Not Applicable

Other hazards

Not available

Precautionary Statements - Prevention

Keep away from all ignition sources including heat, sparks, and flame Keep container closed and grounded Prevent dust accumulations to minimize explosion hazard

3. COMPOSITION/INFORMATION ON INGREDIENTS

| Components | CAS-No. | Weight % |
|-------------------------------|-----------|----------|
| Carboxymethylcellulose Sodium | 9004-32-4 | 100 |

4. FIRST AID MEASURES

First aid measures

General Advice: National Capital Poison Center in the United States can provide assistance if you

have a poison emergency and need to talk to a poison specialist. Call

1-800-222-1222.

Skin Contact: Wash off immediately with soap and plenty of water removing all contaminated clothing and

shoes. Get medical attention if irritation develops.

Eye Contact: Flush eyes with water for 15 minutes. Get medical attention if irritation occurs. If symptoms

persist, call a physician.

Inhalation: Move to fresh air. If breathing is difficult, give oxygen. In case of shortness of breath, give

oxygen. Get medical attention.

Ingestion: Do not induce vomiting without medical advice. Never give anything by mouth to an

unconscious person. Consult a physician if necessary.

Most important symptoms and effects, both acute and delayed

Symptoms May cause eye/skin irritation

Product code: CA194 Product name: 2 / 12

Ingestion may cause gastrointestinal irritation, nausea, vomiting, and diarrhea

Indication of any immediate medical attention and special treatment needed

Notes to Physician: Treat symptomatically.

Protection of first-aiders

First-Aid Providers: Avoid exposure to blood or body fluids. Wear gloves and other necessary protective clothing. Dispose of contaminated clothing and equipment as bio-hazardous waste.

5. FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media: Carbon dioxide (CO2). Dry chemical. Water spray mist or

foam.

Unsuitable Extinguishing Media: No information available.

Specific hazards arising from the chemical

Hazardous Combustion Products: Carbon Monoxide, Carbon Dioxide.

Specific hazards: May be combustible at high temperatures. Avoid

generating dust. Fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is

a potential dust explosion hazard.

Special Protective Actions for Firefighters

Specific Methods: No information available.

Special Protective Equipment for Firefighters: As in any fire, wear self-contained breathing apparatus

pressure-demand, MSHA/NIOSH (approved or equivalent)

and full protective gear

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions: Ensure adequate ventilation. Use personal protective equipment. Avoid contact with skin,

eyes and clothing. Remove all sources of ignition. Avoid dust formation. Avoid dispersal of dust in the air. 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. Non-sparking tools should be used.

Environmental precautions Prevent further leakage or spillage if safe to do so. Do not flush into surface water

or sanitary sewer system.

Methods and material for containment and cleaning up

Methods for containment Stop leak if you can do it without risk. Cover with plastic sheet to prevent

spreading.

Methods for cleaning upSweep up and shovel into suitable containers for disposal. Avoid creating dust.

Use only non-sparking tools. Clean contaminated surface thoroughly.

Product code: CA194 Product name: 3/12

7. HANDLING AND STORAGE

Precautions for safe handling

Technical Measures/Precautions:

Provide sufficient air exchange and/or exhaust in work rooms. Minimize dust generation and accumulation. Avoid dust formation. Dry powders can build static electricity charges when subjected to friction of transfer and mixing operations. All equipment used when handling the product must be grounded. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces. Keep away from incompatible materials.

Safe Handling Advice

Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Avoid dust formation. Do not ingest. Do not breathe vapors/dust. Keep away from heat and sources of ignition. Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Technical Measures/Storage Conditions:

Keep container tightly closed in a dry and well-ventilated place. Store at room temperature in the original container. Store away from incompatible materials.

Incompatible Materials:

Oxidizing agents Acids Bases

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

National occupational exposure limits

United States

| Components | CAS-No. | OSHA | NIOSH | ACGIH | AIHA WEEL |
|----------------------------------|-----------|------|-------|-------|-----------|
| Carboxymethylcellulose Sodium | 9004-32-4 | None | None | None | None |

Canada

| Components | CAS-No. | Canada - Alberta | Canada - British Columbia | Canada - Ontario | Canada - Quebec |
|----------------------------------|-----------|------------------|------------------------------|------------------|-----------------|
| Carboxymethylcellulose Sodium | 9004-32-4 | None | None | None | None |

Australia and Mexico

| Components | CAS-No. | Australia | Mexico |
|-------------------------------|-----------|-----------|--------|
| Carboxymethylcellulose Sodium | 9004-32-4 | None | None |

Appropriate engineering controls

Engineering measures to reduce exposure:

Ensure adequate ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to

Product code: CA194 Product name: 4/12

keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit. Ensure that dust-handling systems (such as exhaust ducts, dust collectors, vessels, and processing equipment) are designed in a manner to prevent the escape of dust into the work area (i.e. there is no leakage from the equipment) It is recommended that all dust control equipment such as local exhaust ventilation and material transport systems involved in the handling of this product contain explosion relief vents or an explosion suppression system or an oxygen-deficient environment

Individual protection measures, such as personal protective equipment

Personal Protective Equipment

Eye protection: Goggles Safety glasses with side-shields

Skin and body protection: Long sleeved clothing

Chemical resistant apron

Gloves

Respiratory protection: Effective dust mask. Use a dust respirator under conditions where exposure to

the substance is apparent (e.g. generation of high concentration of dust (dust clouds), inadequate ventilation, development of respiratory tract irritation), and engineering controls are not feasible. Be sure to use an approved/certified

respirator or equivalent.

Hygiene measures: Avoid contact with skin, eyes and clothing. Wash hands before breaks and

immediately after handling the product. When using, do not eat, drink or smoke.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Appearance: Color:

Solid Powder. White. Off-white.

Odor: Taste Formula:

Odorless. No information available. No information available

Molecular/Formula weight:Flammability:Flashpoint (°C/°F):No information availableNo information availableNo information available

Flash Point Tested according to: Autoignition Temperature (°C/°F): Lower Explosion Limit (%):

Not available 360-370 °C/680-698 °F No information available

Upper Explosion Limit (%): Melting point/range(°C/°F): Decomposition temperature(°C/°F):

Boiling point/range(°C/°F): Bulk density: Density (g/cm3):

No information available No information available 1.59

Specific gravity: pH: Vapor pressure @ 20°C (kPa):

Product code: CA194 Product name: 5 / 12

Evaporation rate: Vapor density: VOC content (g/L):
No information available
No information available

Odor threshold (ppm): Partition coefficient Viscosity:

No information available (n-octanol/water): No information available

No information available

Miscibility:Solubility:No information availableSoluble in Water

10. STABILITY AND REACTIVITY

Reactivity

Reactive with oxidizing agents Reactive with acids Reacts with strong bases

Chemical stability

Stability: Stable under recommended storage conditions.

Possibility of Hazardous Reactions: Hazardous polymerization does not occur

Conditions to avoid: Heat. Avoid dust formation. Dust may form explosive mixture in air. Fine dust

dispersed in air in sufficient concentrations, and in the presence of an ignition

source is a potential dust explosion hazard. Incompatible materials.

Incompatible Materials: Oxidizing agents

Acids Bases

Hazardous decomposition

products:

Carbon monoxide. Carbon dioxide.

Other Information

Corrosivity: No information available

Special Remarks on Corrosivity: No information available

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Principal Routes of Exposure:

Ingestion. Inhalation.

Acute Toxicity

Component Information

| Carboxymethylcellulose Sodium | |
|-------------------------------|-----------|
| CAS-No. | 9004-32-4 |

Product code: CA194 Product name: 6 / 12

LD50/oral/rat = 27000 mg/kg LD50/oral/mouse = >27000 mg/kg LD50/dermal/rabbit = >2000 mg/kg

LD50/dermal/rat = =27000mg/kgOral LD50Rat

>5800mg/m3Inhalation LC50Rat

LC50/inhalation/rat = >5800 mg/m³ Inhalation LC50 Rat 4 h

LC50/inhalation/mouse = No information available

Other LD50 or LC50information = 16000 mg/kg Oral LD50 Guinea Pig

>27000 mg/kg Oral LD50 Rabbit

Product Information

LD50/oral/rat =

VALUE- Acute Tox Oral = 27000 mg/kg

LD50/oral/mouse =

Value - Acute Tox Oral = >27000

LD50/dermal/rabbit

VALUE-Acute Tox Dermal = > 2000 mg/kg

LD50/dermal/rat

VALUE -Acute Tox Dermal = No information available

LC50/inhalation/rat

VALUE-Vapor = No information available **VALUE-Gas** = No information available **VALUE-Dust/Mist** = >5800 mg/m³ (4-hr.)

LC50/Inhalation/mouse

VALUE-Vapor = No information available
VALUE - Gas = No information available
VALUE - Dust/Mist = No information available

Symptoms

Skin Contact: May cause skin irritation.

Eye Contact: May cause eye irritation.

Inhalation May cause irritation of respiratory tract.

Ingestion Not expected to be a health hazard. Ingestion may cause gastrointestinal irritation,

nausea, vomiting and diarrhea.

Aspiration hazard No information available.

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

Chronic Toxicity Prolonged or repeated ingestion may affect the liver, urinary system, and

metabolism. Repeated exposure may cause bronchitis to develop with cough,

phlegm, and /or shortness of breath.

Sensitization: No information available.

Product code: CA194 Product name: 7/12

Mutagenic Effects: No information available

Carcinogenic effects: Not considered carcinogenic.

| Components | CAS-No. | IARC | ACGIH - Carcinogens | NTP | OSHA HCS - Carcinogens | Australia - Notifiable Carcinogenic Substances | Australia - Prohibited Carcinogenic Substances |
|----------------------------------|-----------|------------|------------------------|------------|---------------------------|---|---|
| Carboxymethylcellulose Sodium | 9004-32-4 | Not listed | Not listed | Not listed | Not listed | Not listed | Not listed |

ACGIH (American Conference of Governmental Industrial Hygienists)

IARC (International Agency for Research on Cancer)

NTP (National Toxicology Program)

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

Reproductive toxicity No data is available

Reproductive Effects: No information available Developmental Effects: No information available Teratogenic Effects: No information available

Specific Target Organ Toxicity

STOT - single exposure STOT - repeated exposure Target Organs: No information available. No information available. No information available.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Ecotoxicity effects: Aquatic environment.

Carboxymethylcellulose Sodium - 9004-32-4

Freshwater Fish Species Data: >20000 mg/l 96 h LC50 ONcorhynchus mykiss (Rainbow Trout) (Ecotox - U.S.

EPA)

Water Flea Data: 87.26 mg/l 48 h EC50 Ceriodaphnia dubia (Ecotox - U.S. EPA)

Persistence and degradability: No information available

Bioaccumulative potential: No information available.

Mobility: No information available.

13. DISPOSAL CONSIDERATIONS

Disposal Methods

Waste from residues / unused products:

Product code: CA194 Product name: 8 / 12

Waste must be disposed of in accordance with Federal, State and Local regulation.

Contaminated packaging:

Empty containers should be taken for local recycling, recovery or waste disposal

| Components | CAS-No. | RCRA - F Series Wastes | RCRA - K Series Wastes | RCRA - P Series Wastes | RCRA - U Series Wastes |
|----------------------------------|-----------|---------------------------|---------------------------|---------------------------|---------------------------|
| Carboxymethylcellulose Sodium | 9004-32-4 | None | None | None | None |

14. TRANSPORT INFORMATION

DOT

UN-No: Not Regulated

Proper Shipping Name:
Hazard Class:
Subsidiary Class
No information available

Number

Marine PollutantNo data availableDOT RQ (lbs):No information availableSpecial ProvisionsNo Information availableSymbol(s):No information availableDescription:No information available

TDG (Canada)

UN-No: Not Regulated

Proper Shipping Name:
Hazard Class:
Subsidiary Risk:
Packing Group:
Marine Pollutant
Description:
No information available
No information available
No Information available
No information available

ADR

UN-No: Not Regulated

Proper Shipping Name:
Hazard Class:
Packing Group:
Subsidiary Risk:
No information available
No information available
No information available

IMO / IMDG

UN-No: Not Regulated

Proper Shipping Name:
Hazard Class:
Subsidiary Risk:
Packing Group:
Marine Pollutant

No information available
No information available
No information available
No information available

RID

UN-No: Not Regulated

Proper Shipping Name: No information available Hazard Class: No information available

Product code: CA194 Product name: 9/12

Subsidiary Risk: No information available Packing Group: No information available

ICAO

UN-No: Not Regulated

Proper Shipping Name:
Hazard Class:
Subsidiary Risk:
No information available
No information available
No information available
No information available

IATA

UN-No: Not Regulated

Proper Shipping Name:
Hazard Class:
Subsidiary Risk:
Packing Group:
ERG Code:
No information available

15. REGULATORY INFORMATION

International Inventories

| Components | CAS-No. | U.S. TSCA | KOREA KECL | Philippines (PICCS) | Japan ENCS | CHINA | Australia (AICS) | EINECS-No. |
|-----------------------------------|-----------|------------------------|---------------------|---------------------|--|--------------------|---------------------|-------------|
| Carboxymethylcellulos e Sodium | 9004-32-4 | Present XU (ACTIVE) | Present KE-05354 | Present | Present (8)-181 (8)-185 (8)-203 | Present [33850] | Present | Not present |

U.S. Regulations

Carboxymethylcellulose Sodium

FDA - Food Additives Generally Recognized as Safe (GRAS): 21 CFR 182.1745

FDA - Direct Food Additives 21 CFR 173.310

FDA - 21 CFR - Total Food Additives 133.178 133.179 150.141 150.161 173.310 175.105 182.1745

California Prop. 65: Safe Drinking Water and Toxic Enforcement Act of 1986.

Chemicals Known to the State of California to Cause Cancer:

This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

Chemicals Known to the State of California to Cause Reproductive Toxicity:

This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

| Components | CAS-No. | Carcinogen | Developmental Toxicity | Male | Female |
|-------------------------------|-----------|------------|------------------------|--------------|--------------|
| | | | | Reproductive | Reproductive |
| | | | | Toxicity | Toxicity: |
| Carboxymethylcellulose Sodium | 9004-32-4 | Not Listed | Not Listed | Not Listed | Not Listed |

CERCLA/SARA

| Components | CAS-No. | CERCLA - | Section 302 | Section 302 | Section 313 - | Section 313 - |
|---------------------|-----------|------------------|-------------|----------------|--------------------------|---------------|
| | | Hazardous | Extremely | Extremely | Chemical Category | Reporting |
| | | Substances and | Hazardous | Hazardous | | de minimis |
| | | their Reportable | Substances | Substances and | | |
| | | Quantities | and TPQs | RQs | | |
| Carboxymethylcellul | 9004-32-4 | None | None | None | None | None |

Product code: CA194 Product name:

CARBOXYMETHYLCELLULOSE SODIUM, HIGH VISCOSITY, VISCOSITY OF 1 PERCENT AQUEOUS SOLUTION @ 25 DEG C: 1500-3000 CPS, USP 10/12

| ose Sodium | | | |
|------------|--|--|--|

U.S. TSCA

| Components | CAS-No. | TSCA Section 5(a)2 - Chemicals | TSCA 8(d) -Health and Safety |
|-------------------------------|-----------|--------------------------------|------------------------------|
| | | With Significant New Use Rules | Reporting |
| | | (SNURS) | |
| Carboxymethylcellulose Sodium | 9004-32-4 | Not Applicable | Not Applicable |

Canada

WHIMIS 2015 - GHS Classifications

WHMIS 2015 Hazard Classification Information:

Not a dangerous product according to HPR classification criteria.

Canada Hazardous Products Regulation This product has been classified according to the hazard criteria of the HPR (Hazardous Products Regulation) and the SDS contains all of the information required by the HPR

WHMIS 1988 Hazard Class

Non-controlled

Canada Controlled Products Regulation:

This product has been classified according to the hazard criteria of the CPR (Controlled Products Regulation) and the MSDS contains all of the information required by the CPR.

Inventory

| Components | CAS-No. | Canada (DSL) | Canada (NDSL) |
|-------------------------------|-----------|--------------|---------------|
| Carboxymethylcellulose Sodium | 9004-32-4 | Present | Not Listed |
| | | | |

| Components | CAS-No. | CEPA Schedule I - Toxic Substances |
|-------------------------------|-----------|--------------------------------------|
| Carboxymethylcellulose Sodium | 9004-32-4 | Not listed |
| Components | CAS-No. | CEPA - 2010 Greenhouse Gases Subject |
| | | to Mandatory Reporting |
| Carboxymethylcellulose Sodium | 9004-32-4 | Not listed |

EU Classification

EU GHS - SV - CLP 1272/2008

| Components | CAS-No. | EU GHS - SV - CLP (1272/2008) |
|-------------------------------|-----------|-------------------------------|
| Carboxymethylcellulose Sodium | 9004-32-4 | No information |

EU - CLP (1272/2008)

R-phrase(s)

not determined (not applicable)

S -phrase(s)

Product code: CA194

none

| Components CAS-No. | Classification | Concentration | Safety Phrases |
|--------------------|----------------|---------------|----------------|
|--------------------|----------------|---------------|----------------|

Product name:

11 / 12

| | | Limits: | |
|------------------------|-----------|----------------|--|
| Carboxymethylcellulose | 9004-32-4 | No information | |
| Sodium | | | |

The product is classified in accordance with Annex VI to Directive 67/548/EEC

Indication of danger:

Not dangerous

16. OTHER INFORMATION

Preparation Date: 1/22/2015
Revision Date: 6/13/2018
Prepared by: Sonia Owen

Disclaimer: All chemicals may pose unknown hazards and should be used with caution. This

Safety Data Sheet (SDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this SDS. The physical properties reported in this SDS are obtained from the literature and do not constitute product specifications. Information contained herein does not constitute a warranty, whether expressed or implied, as to the safety, merchantability or fitness of the goods for a particular purpose. Spectrum Chemicals & Laboratory Products, Inc. assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this SDS is based on technical data judged to be reliable, Spectrum assumes no responsibility for the

completeness or accuracy of the information contained herein.

End of Safety Data Sheet