Carboxymethylcellulose Sodium USP MSDS
Dear Customer,

This File Contains Both The ANSI Material Safety Data Sheet and The GHS Safety Data Sheet For The Same Product

Spectrum is currently transitioning all chemical product labeling from the ANSI\(^1\) format to the GHS\(^2\) format (see note below). In order to ensure that you receive complete labelling during the transition, we have included both the ANSI MSDS and the GHS SDS in a single file. The ANSI MSDS is given first, followed by the GHS SDS. Please use whichever matches the container label.

Why It Matters:

The complete precautionary labeling for this chemical consists of BOTH the label on the container AND the matching Material Safety Data Sheet (for ANSI labels) or Safety Data Sheet (for GHS labels). Both elements of the labeling [Label + (M)SDS] are written to be read and understood together, so as to provide complete precautionary information. It is intended for you to read and understood BOTH before handling or using the chemical.

Picking the Right One: 2 Easy Ways To Tell Whether Your Container Has an ANSI Label or a GHS Label

1) GHS labels: any pictogram displayed in the upper left-hand corner will be inside a red diamond. ANSI labels: pictograms, if present, will be inside individual black boxes.

2) GHS labels: on the bottom of the right-hand panel of the label, locate the Lot Number. Directly to the left will be a string of control characters, followed by a single letter. For GHS labels, the string of characters will end in “GHS:"

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**Label in ANSI Format**

---

C\(_2\)H\(_5\)O\(_2\)C

BE159

SIZ SY

Benzyl Benzoate

(Benzoic Acid Phenylethyl Esters)

U.S.P.

CAS 120-51-4

CAUTION:

Keep out of reach of children.

For external use only. Avoid contact with eyes, hair and skin. Avoid breathing vapors. Wash hands after exposure. For use in a well ventilated area.

F.W. 212.24

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CORPORATE OFFICES
14422 South San Pedro Street
Gardena, California 90248
PHONE 310.516.8000
FAX 310.516.9843

AN ISO 9001:2008 REGISTERED COMPANY

www.spectrumchemical.com
\[1\] American National Standards Institute
\[2\] Globally Harmonized System for Hazard Communication

Sincerely,

Regulatory Affairs
1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product code: CA193

Product Name: CARBOXYMETHYLCELLULOSE SODIUM, LOW VISCOSITY, VISCOSITY OF 2 PERCENT AQUEOUS SOLUTION @ 25 DEG C: 10-50 CPS, USP

Chemical Name: No information available

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 cellulose glycolate;
Sodium glycolate cellulose;
Sodium salt of carboxymethylcellulose
Aquaplast; Carmethose; Cellofas; Cellpro; CMC sodium salt; Collowel; Ethoxose;
Lovosa; NaCm-cellulose salt; Tylose C

Recommended use: No information available.

CAS #: 9004-32-4

RTECS #: FJ5950000

CI#: Not available

Formula: No information available

Supplier: Spectrum Chemicals and Laboratory Products, Inc.
14422 South San Pedro St.
Gardena, CA 90248
(310) 516-8000

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

Emergency Telephone Number: CHEMTREC: 1-800-424-9300
2. HAZARDS IDENTIFICATION

**EMERGENCY OVERVIEW**

**WARNING!**
MAY FORM COMBUSTIBLE DUST CONCENTRATIONS IN AIR
May cause skin and eye irritation
May cause irritation of respiratory tract

<table>
<thead>
<tr>
<th>Odor:</th>
<th>Physical state:</th>
<th>Appearance:</th>
<th>Color:</th>
</tr>
</thead>
</table>

**OSHA Regulatory Status**
This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200)

**POTENTIAL HEALTH EFFECTS**

**Principal Routes of Exposure:**
Ingestion. Inhalation.

**Acute Potential Health Effects:**

**Skin Contact:**
May cause skin irritation.

**Eye Contact:**
May cause eye irritation.

**Inhalation:**
May cause irritation of respiratory tract.

**Ingestion:**
Expected to be a low hazard. Ingestion may cause gastrointestinal irritation, nausea, vomiting, and diarrhoea.

**Chronic Potential Health Effects:**

<table>
<thead>
<tr>
<th>Component</th>
<th>Carcinogen Status:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carboxymethylcellulose Sodium 9004-32-4 (100)</td>
<td>No information available</td>
</tr>
</tbody>
</table>

**Target Organs:**
No information available

**Mutagenic Effects:**
No information available

**Teratogenic Effects:**
No information available

**Aggravated Medical Conditions:**
No information available

See Section 11 for additional Toxicological Information

**Product code:** CA193

**Product name:**
CARBOXYMETHYLCHELULOSE SODIUM, LOW VISCOSITY, VISCOSITY OF 2 PERCENT AQUEOUS SOLUTION @ 25 DEG C: 10-50 CPS, USP
POTENTIAL ENVIRONMENTAL EFFECTS

No information available

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>Weight %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carboxymethylcellulose Sodium</td>
<td>9004-32-4</td>
<td>100</td>
</tr>
</tbody>
</table>

4. FIRST AID MEASURES

General Advice: Poison information centres in each State capital city can provide additional assistance for scheduled poisons (13 1126)

Skin Contact: Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. Get medical attention if irritation develops.

Eye Contact: Flush eye 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.

Notes to Physician: Treat symptomatically

5. FIRE-FIGHTING MEASURES

Flammable Properties

Flashpoint (°C/°F): No information available.

Flash Point Tested according to: Not available

Lower Explosion Limit (%): No information available

Upper Explosion Limit (%): No information available

Autoignition Temperature (°C/°F): 360-370 °C/680-698 °F

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

Unsuitable Extinguishing Media: No information available.

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 Equipment for Firefighters: As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

Specific Methods: No information available.

6. ACCIDENTAL RELEASE MEASURES

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. Nonsparking 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 for Cleaning Up: Sweep up and shovel into suitable containers for disposal. Avoid dust formation. Clean contaminated surface thoroughly.

7. HANDLING AND STORAGE

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 vapours/dust. Keep away from heat and sources of ignition. Handle in accordance with good industrial hygiene and safety practice.

Storage

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.


8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Product code: CA193

Product name: CARBOXYMETHYLCELLULOSE SODIUM, LOW VISCOSITY, VISCOSITY OF 2 PERCENT AQUEOUS SOLUTION @ 25 DEG C: 10-50 CPS, USP
**Engineering measures to reduce exposure:**

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

**Personal Protective Equipment**

- **Eye protection:** Goggles. Safety glasses with side-shields.
- **Skin and body protection:** Long sleeved clothing. Chemical resistant apron. Gloves.
- **Respiratory protection:** Wear respirator with dust filter.
- **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.

**National occupational exposure limits**

**United States**

U.S Occupational Exposure Limits: Not determined

<table>
<thead>
<tr>
<th>Components</th>
<th>OSHA</th>
<th>NIOSH</th>
<th>ACGIH</th>
<th>AIHA WHEEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carboxymethylcellulose Sodium - 9004-32-4</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>

**Canada**

Canada Occupational Exposure Limits: Not determined

<table>
<thead>
<tr>
<th>Components</th>
<th>Alberta</th>
<th>British Columbia</th>
<th>Ontario</th>
<th>Quebec</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carboxymethylcellulose Sodium - 9004-32-4</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
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</tbody>
</table>

**Australia and Mexico**

Occupational Exposure Limits for Australia and Mexico: Not determined

<table>
<thead>
<tr>
<th>Components</th>
<th>Australia</th>
<th>Mexico</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carboxymethylcellulose Sodium - 9004-32-4</td>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>

9. PHYSICAL AND CHEMICAL PROPERTIES

Product code: CA193

Product name: CARBOXYMETHYLCELLULOSE SODIUM, LOW VISCOSITY, VISCOSITY OF 2 PERCENT AQUEOUS SOLUTION @ 25 DEG C: 10-50 CPS, USP
9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
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</thead>
<tbody>
<tr>
<td>Physical state:</td>
<td>Solid.</td>
</tr>
<tr>
<td>Appearance:</td>
<td>Powder.</td>
</tr>
<tr>
<td>Odor:</td>
<td>Odorless.</td>
</tr>
<tr>
<td>Taste:</td>
<td>No information available</td>
</tr>
<tr>
<td>Molecular/Formula weight:</td>
<td>No information available</td>
</tr>
<tr>
<td>Autoignition Temperature (°C/°F):</td>
<td>No data available</td>
</tr>
<tr>
<td>Melting point/range(°C/°F):</td>
<td>No information available</td>
</tr>
<tr>
<td>Boiling point/range(°C/°F):</td>
<td>No information available</td>
</tr>
<tr>
<td>pH:</td>
<td>No information available</td>
</tr>
<tr>
<td>Specific gravity:</td>
<td>No information available</td>
</tr>
<tr>
<td>Density (g/cm³):</td>
<td>1.59</td>
</tr>
<tr>
<td>Decomposition temperature(°C/°F):</td>
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<tr>
<td>Bulk density:</td>
<td>No information available</td>
</tr>
<tr>
<td>Vapor pressure @ 20°C (kPa):</td>
<td>No information available</td>
</tr>
<tr>
<td>Evaporation rate:</td>
<td>No information available</td>
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<tr>
<td>Vapor density:</td>
<td>No information available</td>
</tr>
<tr>
<td>VOC content (g/L):</td>
<td>No information available</td>
</tr>
<tr>
<td>Odor threshold (ppm):</td>
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</tr>
<tr>
<td>Partition coefficient (n-octanol/water):</td>
<td>No information available</td>
</tr>
<tr>
<td>Partition coefficient (n-octanol/water):</td>
<td>No information available</td>
</tr>
<tr>
<td>Miscibility:</td>
<td>No information available</td>
</tr>
</tbody>
</table>

Solubility:
Soluble in Water

10. STABILITY AND REACTIVITY

Stability: Stable at normal conditions
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.
Hazardous decomposition products: Carbon monoxide. Carbon dioxide.
Possibility of Hazardous Reactions: No information available
Polymerization: Hazardous polymerisation does not occur
Corrosivity: No information available
Special Remarks on Corrosivity: No information available

11. TOXICOLOGICAL INFORMATION

Acute Toxicity
Component Information

Product code: CA193
Product name: CARBOXYMETHYLCELLULOSE SODIUM, LOW VISCOSITY, VISCOSITY OF 2 PERCENT AQUEOUS SOLUTION @ 25 DEG C: 10-50 CPS, USP
Product Information

LC50/inhalation/rat = 27000 mg/kg 4 h
LC50/inhalation/mouse = >58000 mg/kg 4 h
LC50/dermal/rabbit = >2000 mg/kg
LC50/dermal/rat = No information available
LC50/oral/rabbit = >2000 mg/kg
LC50/oral/rat = 27000 mg/kg
LD50/oral/mouse = >27000 mg/kg
LD50/oral/rat = 27000 mg/kg

Local Effects

Skin irritation: May cause skin irritation.
Eye irritation: Contact with eyes may cause irritation.
Inhalation: May cause irritation of respiratory tract.
Ingestion: Not expected to be a health hazard
Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea
Sensitization: No information available

Chronic Toxicity

Chronic Toxicity
Prolonged or repeated ingestion may affect the liver, urinary system, and metabolism (sodium levels). Repeated exposure may cause bronchitis to develop with cough, phlegm, and/or shortness of breath.

Carcinogenic effects: Not considered carcinogenic

<table>
<thead>
<tr>
<th>Components</th>
<th>NTP</th>
<th>IARC</th>
<th>OSHA HCS - Carcinogens</th>
<th>ACGIH - Carcinogens</th>
<th>Australia - Prohibited Carcinogenic Substances</th>
<th>Australia - Notifiable Carcinogenic Substances</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carboxymethylcellulose</td>
<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
</tr>
<tr>
<td>Sodium</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Mutagenic Effects: No information available
Reproductive Effects: No information available
Teratogenic Effects: No information available

Product code: CA193
Product name: CARBOXYMETHYLCELLULOSE SODIUM, LOW VISCOSITY, VISCOSITY OF 2 PERCENT AQUEOUS SOLUTION @ 25 DEG C: 10-50 CPS, USP
12. ECOLOGICAL INFORMATION

ECOTOXICITY

Toxicity to terrestrial and aquatic plants and animals: Information given is based on data on the components and the ecotoxicology of similar products

Ecotoxicity effects: Aquatic environment.

Aquatic toxicity: No information available

Carboxymethylcellulose Sodium - 9004-32-4
Freshwater Fish Species Data: >20000 mg/l 96 h LC50 ONcorrhynchus mykiss (Rainbow Trout) (Ecotox - U.S. EPA)
Water Flea Data: 87.26 mg/l 48 h EC50 Ceriodaphnia dubia (Ecotox - U.S. EPA)

Mobility: No information available

Persistence and degradability: No information available

Bioaccumulative potential: No information available

13. DISPOSAL CONSIDERATIONS

Waste from residues / unused products: 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

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Carboxymethylcellulose Sodium</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>

14. TRANSPORT INFORMATION

DOT

UN-No: Not Regulated
Proper Shipping Name: No information available
Hazard Class: No information available
Packing Group: None
Subsidiary Risk: Not applicable
Marine Pollutant: No data available
ERG No: No information available
DOT RQ (lbs): No information available

TDG (Canada)

UN-No: Not Regulated
Proper Shipping Name: No information available
Hazard Class: No information available
Packing Group: No information available
Subsidiary Risk: No information available
Description: No information available

Product code: CA193

Product name: CARBOXYMETHYLCELLULOSE SODIUM, LOW VISCOSITY, VISCOSITY OF 2 PERCENT AQUEOUS SOLUTION @ 25 DEG C: 10-50 CPS, USP
15. REGULATORY INFORMATION

International Inventories

Product code: CA193
Product name: CARBOXYMETHYLCELLULOSE SODIUM, LOW VISCOSITY, VISCOSITY OF 2 PERCENT AQUEOUS SOLUTION @ 25 DEG C: 10-50 CPS, USP
Components | U.S. TSCA | Philippines (PICCS) | KOREA KECL | Japan ENCS | CHINA | Australia (AICS) | EINECS-No.  
--- | --- | --- | --- | --- | --- | --- | ---  
Carboxymethylcellulose Sodium | Present XU | Present | Present KE-05354 | 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

**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 | Carcinogen | Developmental Toxicity | Male Reproductive Toxicity | Female Reproductive Toxicity:  
--- | --- | --- | --- | ---  
Carboxymethylcellulose Sodium | Not Listed | Not Listed | Not Listed | Not Listed  

**CERCLA/SARA**

| Components | CERCLA - Hazardous Substances and their Reportable Quantities | Section 302 Extremely Hazardous Substances and TPQs | Section 302 Extremely Hazardous Substances and RQs | Section 313 - Chemical Category | Section 313 - Reporting de minimis  
--- | --- | --- | --- | --- | ---  
Carboxymethylcellulose Sodium | None | None | None | None | None  

**U.S. TSCA**

| Components | TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS) | TSCA 8(d) - Health and Safety Reporting  
--- | --- | ---  
Carboxymethylcellulose Sodium | Not Applicable | Not Applicable  

**Canada**

**WHMIS 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 | Canada (DSL) | Canada (NDSL)  
--- | --- | ---  
Carboxymethylcellulose Sodium | Present | Not Listed  

| Components | CEPA Schedule I - Toxic Substances | CEPA - 2010 Greenhouse Gases Subject to Manditory Reporting  
--- | --- | ---  

**Product code:** CA193

**Product name:**
CARBOXYMETHYLCELLULOSE SODIUM, LOW VISCOSITY, VISCOSITY OF 2 PERCENT AQUEOUS SOLUTION @ 25 DEG C: 10-50 CPS, USP
The product is classified in accordance with Annex VI to Directive 67/548/EEC.

Indication of danger:
Not dangerous

16. OTHER INFORMATION

The MSDS format complies with ANSI Z400.1/Z129.1-2010 standards.

Preparation Date: 23-Jan-2015

Reason for revision: Not applicable

Prepared by: Sonia Owen

Literature reference: No information available

All chemicals may pose unknown hazards and should be used with caution. This Material Safety Data Sheet (MSDS) 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 MSDS. The physical properties reported in this MSDS 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 MSDS is based on technical data judged to be reliable, Spectrum assumes no responsibility for the completeness or accuracy of the information contained herein.
SAFETY DATA SHEET

Preparation Date: 1/22/2015
Revision Date: 1/22/2015
Revision Number: G1

Product code: CA193
Product Name: CARBOXYMETHYLCELLULOSE SODIUM, LOW VISCOSITY, VISCOSITY OF 2 PERCENT AQUEOUS SOLUTION @ 25 DEG C: 10-50 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 cellulose 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: No information available.
Uses advised against: No information available

Supplier:
Spectrum Chemicals and Laboratory Products, Inc.
14422 South San Pedro St.
Gardena, CA 90248
(310) 516-8000

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

Emergency telephone number
Chemtrec 1-800-424-9300

Contact Person:
Martin LaBenz (West Coast)
Ibad Tirmiz (East Coast)
2. HAZARDS IDENTIFICATION

Classification

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

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

<table>
<thead>
<tr>
<th>Combustible dust</th>
</tr>
</thead>
</table>

Label elements

Warning

May form combustible dust concentrations in air

Hazards not otherwise classified (HNOC)
Not Applicable

Other hazards
Not available

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>Weight %</th>
<th>Trade Secret</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carboxymethylcellulose Sodium</td>
<td>9004-32-4</td>
<td>100</td>
<td>*</td>
</tr>
</tbody>
</table>

4. FIRST AID MEASURES

First aid measures

General Advice: Poison information centres in each State capital city can provide additional assistance for scheduled poisons (13 1126)

Skin Contact: Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. Get medical attention if irritation develops.

Eye Contact: Flush eye 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. Ingestion may cause gastrointestinal irritation, nausea, vomiting, and diarrhoea.

Product code: CA193

Product name:
CARBOXYMETHYLCHELULOSE SODIUM, LOW VISCOSITY, VISCOSITY OF 2 PERCENT AQUEOUS SOLUTION @ 25 DEG C: 10-50 CPS, USP
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. Nonsparking 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 up: Sweep up and shovel into suitable containers for disposal. Use only non-sparking tools. Clean contaminated surface thoroughly.

7. HANDLING AND STORAGE

Product code: CA193

Product name: CARBOXYMETHYLCELLULOSE SODIUM, LOW VISCOSITY, VISCOSITY OF 2 PERCENT AQUEOUS SOLUTION @ 25 DEG C: 10-50 CPS, USP
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 vapours/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:

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

National occupational exposure limits

U.S Occupational Exposure Limits: Not determined

United States

<table>
<thead>
<tr>
<th>Components</th>
<th>OSHA</th>
<th>NIOSH</th>
<th>ACGIH</th>
<th>AIHA WHEEL</th>
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<td>Carboxymethylcellulose Sodium - 9004-32-4</td>
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Canada

Canada Occupational Exposure Limits: Not determined

<table>
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<tr>
<th>Components</th>
<th>Alberta</th>
<th>British Columbia</th>
<th>Ontario</th>
<th>Quebec</th>
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</thead>
<tbody>
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Australia and Mexico

Occupational Exposure Limits for Australia and Mexico: Not determined

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<tr>
<th>Components</th>
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<th>Mexico</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carboxymethylcellulose Sodium - 9004-32-4</td>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>

Appropriate engineering controls
Engineering measures to reduce exposure:

Ensure adequate ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to 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:** Wear respirator with dust filter..
- **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
9. PHYSICAL AND CHEMICAL PROPERTIES

**Physical state:** Solid.

**Appearance:** Powder.

**Color:** White. Off-white.

**Odor:** Odorless.

**Taste**
No information available

**Color:** No information available

**Molecular/Formula weight:** No information available

**Flash point (°C):** No data available

**Flashpoint (°C/°F):** No information available.

**Stability:**
Stable at normal 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:**

**Hazardous decomposition products:**
Carbon monoxide. Carbon dioxide.

**Miscibility:**
No information available

**Solubility:** Soluble in Water

**Density (g/cm³):** 1.59

**Autoignition Temperature (°C/°F):** 360-370 °C/680-698 °F

**Boiling point/range(°C/°F):** No information available

**Decomposition temperature(°C/°F):** No information available

**Specific gravity:** No information available

**Flash Point Tested according to:** No data available

**Lower Explosion Limit (%):** No information available

**Upper Explosion Limit (%):** No information available

**pH:** No information available

**pH:** No information available

**Melting point/range(°C/°F):** No information available

**Vapor pressure @ 20°C (kPa):** No information available

**Vapor density:** No information available

**Partition coefficient (n-octanol/water):** No information available

**Partition coefficient (n-octanol/water):** No information available

**VOC content (g/L):** No information available

**Viscosity:** No information available

**Odor:** Odorless.

**Miscibility:**
No information available

**Solubility:** Soluble in Water

**Miscibility:**
No information available

**Solubility:**
Soluble in Water

10. STABILITY AND REACTIVITY

**Reactivity**
Reactive with oxidizing agents
Reactive with acids
Reacts with bases

**Chemical stability**

**Stability:** Stable at normal 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:**

**Hazardous decomposition products:**
Carbon monoxide. Carbon dioxide.

**Other Information**

**Corrosivity:**
No information available

**Product code:** CA193

**Product name:** CARBOXYMETHYLCELLULOSE SODIUM, LOW VISCOSITY, VISCOSITY OF 2 PERCENT AQUEOUS SOLUTION @ 25 DEG C: 10-50 CPS, USP
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 - 9004-32-4**

- **LD50/oral/rat** = 27000 mg/kg
- **LD50/oral/mouse** = >27000 mg/kg
- **LD50/dermal/rabbit** = >2000 mg/kg
- **LD50/dermal/rat** = No information available
- **LC50/inhalation/rat** = >5800 mg/m³ Inhalation LC50 Rat 4 h
- **LC50/inhalation/mouse** = No information available
- **Other LD50 or LC50 information** = 16000 mg/kg Oral LD50 Guinea Pig
  >27000 mg/kg Oral LD50 Rabbit

**Product Information**

- **LD50/oral/rat** =
  - VALUE- Acute Tox Oral = 27000mg/kg
- **LD50/oral/mouse** =
  - Value - Acute Tox Oral = >27000
- **LD50/dermal/rabbit**
  - VALUE-Acute Tox Dermal = >2000mg/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 = >5800mg/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.

**Product code:** CA193

**Product name:**
CARBOXYMETHYLCELLULOSE SODIUM, LOW VISCOSITY, VISCOSITY OF 2 PERCENT AQUEOUS SOLUTION @ 25 DEG C: 10-50 CPS, USP
Inhalation: May cause irritation of respiratory tract.

Ingestion: Not expected to be a health hazard. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.

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 (sodium levels). Repeated exposure may cause bronchitis to develop with cough, phlegm, and/or shortness of breath.

**Sensitization:** No information available.

**Mutagenic Effects:** No information available.

**Carcinogenic effects:** Not considered carcinogenic.

**Components**

<table>
<thead>
<tr>
<th>Components</th>
<th>ACGIH - Carcinogens</th>
<th>IARC</th>
<th>NTP</th>
<th>OSHA HCS - Carcinogens</th>
<th>Australia - Prohibited Carcinogenic Substances</th>
<th>Australia - Notifiable Carcinogenic Substances</th>
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<tbody>
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<td>Not listed</td>
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<td></td>
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</table>

**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** No information available.

**STOT - repeated exposure** No information available.

**Target Organs:** 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.

**Product code:** CA193

**Product name:** CARBOXYMETHYLCELLULOSE SODIUM, LOW VISCOSITY, VISCOSITY OF 2 PERCENT AQUEOUS SOLUTION @ 25 DEG C: 10-50 CPS, USP
13. DISPOSAL CONSIDERATIONS

Disposal Methods

Waste from residues / unused products:
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

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<tbody>
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<td>None</td>
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</table>

14. TRANSPORT INFORMATION

DOT

UN-No: Not Regulated
Proper Shipping Name: No information available
Hazard Class: No information available
Subsidiary Risk: Not applicable
Packing Group: None
ERG No: No information available
Marine Pollutant: No data available
DOT RQ (lbs): No information available

TDG (Canada)

UN-No: Not Regulated
Proper Shipping Name: No information available
Hazard Class: No information available
Subsidiary Risk: No information available
Packing Group: No information available
Description: No information available

ADR

UN-No: Not Regulated
Proper Shipping Name: No information available
Hazard Class: No information available
Packing Group: No information available
Subsidiary Risk: No information available
Classification Code: No information available
Description: No information available
CEFIC Tremcard No: No information available

IMO / IMDG

UN-No: Not Regulated
Proper Shipping Name: No information available
Hazard Class: No information available
Subsidiary Risk: No information available

Product code: CA193

Product name: CARBOXYMETHYLCELLULOSE SODIUM, LOW VISCOSITY, VISCOSITY OF 2 PERCENT AQUEOUS SOLUTION @ 25 DEG C: 10-50 CPS, USP
14. TRANSPORT INFORMATION

| Packing Group: | No information available |
| Description:   | No information available |
| IMDG Page:     | No information available |
| Marine Pollutant: | No information available |
| MFAG:          | No information available |
| Maximum Quantity: | No information available |

RID

| UN-No:       | Not Regulated |
| Proper Shipping Name: | No information available |
| Hazard Class:  | No information available |
| Subsidiary Risk: | No information available |
| Packing Group: | No information available |
| Classification Code: | No information available |
| Description:  | No information available |

ICAO

| UN-No:       | Not Regulated |
| Proper Shipping Name: | No information available |
| Hazard Class:  | No information available |
| Subsidiary Risk: | No information available |
| Packing Group: | No information available |
| Description:  | No information available |

IATA

| UN-No:       | Not Regulated |
| Proper Shipping Name: | No information available |
| Hazard Class:  | No information available |
| Subsidiary Risk: | No information available |
| Packing Group: | No information available |
| Description:  | No information available |

15. REGULATORY INFORMATION

International Inventories

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<td>Present KE-05354</td>
<td>Present</td>
<td>Present (8)-185 (8)-203</td>
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</table>

U.S. Regulations

Carboxymethylcellulose Sodium

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


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)

Product code: CA193

Product name:

CARBOXYMETHYLCELLULOSE SODIUM, LOW VISCOSITY, VISCOSITY OF 2 PERCENT AQUEOUS SOLUTION @ 25 DEG C: 10-50 CPS, USP
### Components

<table>
<thead>
<tr>
<th>Components</th>
<th>Carcinogen</th>
<th>Developmental Toxicity</th>
<th>Male Reproductive Toxicity</th>
<th>Female Reproductive Toxicity</th>
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### CERCLA/SARA

<table>
<thead>
<tr>
<th>Components</th>
<th>CERCLA - Hazardous Substances and their Reportable Quantities</th>
<th>Section 302 Extremely Hazardous Substances and TPQs</th>
<th>Section 302 Extremely Hazardous Substances and RQs</th>
<th>Section 313 - Chemical Category</th>
<th>Section 313 - Reporting de minimis</th>
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### U.S. TSCA

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<tr>
<th>Components</th>
<th>TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS)</th>
<th>TSCA 8(d) - Health and Safety Reporting</th>
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<tbody>
<tr>
<td>Carboxymethylcellulose Sodium</td>
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### Canada

**WHMIS 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

<table>
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<th>Components</th>
<th>Canada (DSL)</th>
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<tr>
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<th>CEPA Schedule I - Toxic Substances</th>
<th>CEPA - 2010 Greenhouse Gases Subject to Mandatory Reporting</th>
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### EU Classification

**R-phrase(s)**
not determined

**S-phrase(s)**
none

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<th>Concentration Limits:</th>
<th>Safety Phrases</th>
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<td>Carboxymethylcellulose Sodium</td>
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</table>

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

**Product code:** CA193

**Product name:**
CARBOXYMETHYLCELLULOSE SODIUM, LOW VISCOSITY, VISCOSITY OF 2 PERCENT AQUEOUS SOLUTION @ 25 DEG C: 10-50 CPS, USP
Indication of danger:
Not dangerous

16. OTHER INFORMATION

<table>
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<tr>
<th>NFPA</th>
<th>HMIS</th>
<th>Personal Protective Equipment</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>Glasses, Face shield, Mask, Glove</td>
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</tbody>
</table>

Preparation Date: 1/22/2015
Revision Date: 1/22/2015
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

Product code: CA193

Product name:
CARBOXYMETHYLCELLULOSE SODIUM, LOW VISCOSITY, VISCOSITY OF 2 PERCENT AQUEOUS SOLUTION @ 25 DEG C: 10-50 CPS, USP
Contact Distributor
www.qualityexcipients.com
info@qualityexcipients.com