

Chromatography Media
Safety Data Sheet
Cellufine™ C-500

1. Product & Company Identification

Product Name	: Cellufine C-500
General Use	: Liquid Chromatography Media
Product Description	: Beads slurry of cross-linked cellulose containing carboxymethyl group in 20% of EtOH/H ₂ O
SDS Number	: CPS-F-0009M-USA
Manufacturer	
Company Name	: JNC CORPORATION
Address	: Shin-Otemachi BLDG., 2-1, Otemachi 2-chome, Chiyoda-ku, Tokyo 100-8105, Japan
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Emergency telephone number	: +81-3-3243-6150

2. Hazards identification

Hazard classification: Flammable Liquids – Category 3

GHS label elements

Signal word: Warning

Hazard statements: Flammable liquid and vapor

Pictograms:



Precautionary statements:

Keep away from heat/sparks/open flames/hot surfaces. – No smoking.

Keep container tightly closed.

Use explosion-proof equipment.

Use only non-sparking tools.

Take precautionary measures against static discharge.

Wear protective gloves/eye protection/face protection.

If on skin (or hair): Take off immediately all contaminated clothing.

Rinse skin with water/shower.

In case of fire: Use carbon dioxide, dry chemical powder, alcohol resistant foam, or water to extinguish.

Dispose of contents/container in accordance with local/regional/national/international regulations.

Unclassified hazards:

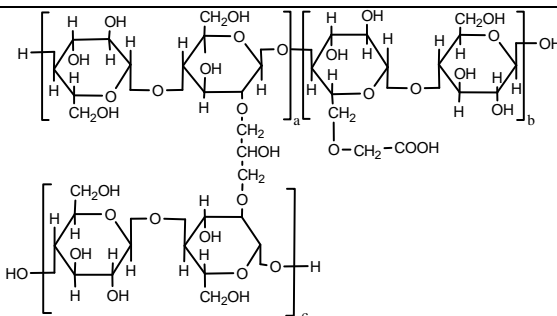
May be harmful if inhaled and ingested.

May cause eye and skin irritation.

Percentage of ingredients with unknown toxicity:
Not applicable

3. Composition/Information on ingredients

Classification of the Substance or Mixture: Mixture

Component	Wt %	CAS No.	Chemical Formula
Cellufine C-500	10	257861-61-3	 <p>The chemical structure shows a cellulose backbone consisting of glucose units linked by beta-1,4-glycosidic bonds. A carboxymethyl group (-CH₂-COOH) is attached to the C2 position of the glucose units, and a hydroxymethyl group (-CH₂-OH) is attached to the C6 position. The repeating unit is shown with subscripts 'a' and 'b'.</p>
EtOH	8 – 18	64-17-5	CH ₃ CH ₂ OH
Water	72 – 82	7732-18-5	H ₂ O

The specific percentages of composition have been withheld as trade secrets.

4. First aid measures

General advice	: Wash off immediately with soap and plenty of water. In the case of inhaling dust and/or fumes, use self-contained breathing apparatus and dust impervious protective suit. Use personal protective equipment.
Inhalation	: Move victim to fresh air. If breathing is difficult, give oxygen. If irritation persists, consult physician.
Eye	: Remove any contact lenses at once. Flush eyes well with flooding amounts of running water for at least 15 minutes. Assure adequate flushing by separating the eyelids with sterile fingers. If irritation persists, consult a physician.
Skin	: Remove contaminated clothes and shoes, rinse skin with plenty of water or shower. Use soap to help assure removal. If irritation persists, consult a physician.
Ingestion	: Rinse mouth and give plenty of water to dilute the substance. Never give anything by mouth to an unconscious person. Consult a physician.
Protection to first-aides	: Rescuers wear suitable protective equipment such as rubber gloves and tight-fitting safety goggles.
Note to physician	: Treatment may vary with condition of victim and specifics of incident.

5. Fire-fighting measures

Flammable properties : Flammable

Extinguishing media	: Carbon dioxide, dry chemical powder, alcohol resistant form, water
Specific hazards	: Carbon monoxide and nitrogen oxides may be formed
Fire-fighting instructions	: Wear full fire-fighting turnout gear (full banker gear) and respiratory protection (self-contained breathing apparatus).

6. Accidental release measures

Personal precautions	: Remove ignition sources and ventilate area. In case of insufficient ventilation, wear suitable respiratory
Environmental precautions	: Prevent spills from entering sewers, watercourses or low area.
Methods for clean up	: Do not touch spilled material without suitable protection (See section 8). Take up spilled material with ashes or other absorbents. After material is completely picked up, wash the spill site with soap and water and ventilate the area. Put all waste in a plastic bag for disposal and seal it tightly. Remove, clean, or dispose of contaminated clothing.

7. Handling and storage

Handling	: Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure. Handle material with suitable protection.
Storage	: After opened bottle store away from sunlight in a cool (2-8 °C {35.6-46.4 °F}) well –ventilated dry place.
Incompatible products	: Oxidizers, peroxides, acids, alkalis, anhydrides

8. Exposure controls/personal protection

Engineering measures	: Use exhaust ventilation to keep airborne concentrations below exposure limits. Use only with adequate ventilation.
Ventilation	: Local exhaust ; Necessary, Mechanical (General) ; Recommended
Control parameter	
OSHA Final limits	: None established (Cellufine C-500), TWA= 1000 ppm, 1900 mg/m ³ (EtOH)
ACGIH TLV(s)	: None established (Cellufine C-500), TWA= 1000 ppm, 1880 mg/m ³ (EtOH)
Personal protection	
Respiratory protection	: None established (Cellufine C-500)
Hand protection	: Chemical resistant gloves
Eye protection	: Safety glasses (goggles)
Skin protection	: Protective clothing

9. Physical and chemical properties

Appearance	: White-slightly grayish slurry
ODOR	: Not available
Odor threshold	: Not available

pH	: Not available
Boiling point	: Not available
Melting point	: Not available
Flash point	: 35 – 38°C
Evaporation rate	: Not available
Flammability (solid, gas)	: Not applicable
Decomposition temperature	: Not available
Explosive limits	: Not available
Vapor pressure	: Not available
Vapor density	: Not available
Specific gravity	: Not available
Solubility in; Water	: Insoluble
log Po/w	: Not available
Autoignition temperature	: Not available
Viscosity	: Not available

10. Stability and reactivity

Reactivity	: No data available
Chemical stability	: No data available
Condition to avoid	: Sunlight, heat
Incompatibility (material to avoid)	: Oxidizers, acids, alkalis
Hazardous decomposition products	: Carbon monoxide and nitrogen oxides may be formed
Hazardous polymerization	: Will not occur.

11. Toxicological information

	Cellufine C-500	EtOH
Acute toxicity data	: Not available	: TDLo (oral, infant): 11712 µL/kg (JOUOD4 9, 53, 1987) : TDLo (oral, man): 700mg/kg (NTOTDY 8, 77, 1986) : LD50 (oral, rat): 9,000mg/kg (VCVGK* -, 93, 1984) : LC50 (ihl, rat): 20,000ppm/10H (NPIRI* 1, 44, 1974)
Irritation data	: Not available	: Skin; rabbit; 20mg/24H; Moderate (85JCAE -, 189, 1986) : Eye; rabbit; 500mg/24H; Mild (85JCAE -, 189, 1986)
Mutation data	: Not available	: DNA damage; S. cerevisiae; 850mmol/L (MUREAV326, 165, 1995) : Mutation in microorganisms; S. typhimurium; 11pph (ENVRAL 52, 225, 1990) : Cytogenetic analysis; human; lymphocyte; 2.5pph/24H (MUREAV 537,117, 2003)

Reproductive effects	: Not available	: TDLo (oral, woman): 250mg/kg (37 W preg); Effects on embryo or Fetus – other effects to embryo (AJOGAH 145, 251, 1983) TDLo (oral, rat): 22.5mg/kg (11-20 D preg); Specific Developmental Abnormalities – Central Nervous Systems (NETEEC 24, 719, 2002)
Tumorigenic data	: Not available	: TDLo (oral, mouse): 320mg/kg/50W-I (CALEDQ 13, 345, 1981)

12. Ecological information

	Cellufine C-500	EtOH
Biodegradability	: Not available	: Biodegradable
Bioaccumulation potential	: Not available	: Not available
Aquatic toxicity	: Not available	: Not available
Other information	: Not available	: WGK; 1

13. Disposal consideration

Burn in a chemical incinerator equipped with an afterburner and scrubber in accordance with all applicable regulations. Any disposal practice must be in compliance with country, local or state and federal laws and regulations (contact country, local or state environmental agency for specific rules).

14. Transport information

UN number	: 1170 (Not applicable : An aqueous solution containing not more than 24% alcohol by volume is not subject to the requirements)
Class	: 3
Packing group	: II
RID/ADR	: Not Classified. An aqueous solution containing not more than 24% alcohol by volume is not subject to the requirements of RID/ADR. (SP No. 144)
IMDG	: Not Classified. An aqueous solution containing not more than 24% alcohol by volume is not subject to the provisions of IMDG Code. (SP No. 144)
ICAO/IATA	: Not Classified. An aqueous solution containing not more than 24% alcohol by volume is not subject to Dangerous Goods Regulations. (SP No. A58(144))
US DOT	: Not Classified. An aqueous solution containing no less than 50 percent water, 24 percent or less alcohol by volume and no other hazardous materials is exempted from hazardous material under 49CFR173.150(e)(2).

15. Regulatory information

Cellufine C-500

EtOH

JNC CORPORATION

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SDS # CPS-F-0009M-USA / Cellufine C-500

US Regulations	: Not listed	: CAA/111 Volat. Org. Comp, NIOSH Recommend. Subst., IARC Subst. Overall Eval., NTP Test. Prog., DOT Haz. Mat., Mass. Subst. List, New Jers. RTK Haz. Subst. List, Canada WHMIS IDL 0.1% conc.
EU regulations	: Not listed	: SYMBOL: F R-phrases: 11 S-phrases: 7-16 Keep container tightly closed. Keep away from sources of –No smoking. EC index No: 603-002-00-5

16. Other information

This information is furnished without warranty, express or implied, except that it is accurate to the best knowledge of JNC Corporation. It relates to only to the specific product designated herein, and does not relate to use in combination with any other material or in any process. JNC Corporation assumes no legal responsibility for use of or reliance upon this information.
