spectrum®



SAFETY DATA SHEET

Preparation Date: 10/29/2015	Revision date 5/14/2019	Revision Number: G3
	1. IDENTIFICATION	
Product identifier		
Product code: Product Name:	C1679 MICROCRYSTALLINE CELLULOSE, NF	
Other means of identification Synonyms: CAS #: RTECS # CI#:	cellulose microcristalline (French); celulosa microci 9004-34-6 FJ5691460 Not available	ristalina (Spanish)
Recommended use of the chem		
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: Emergency telephone number Contact Person: Contact Person:	https://www.spectrumchemical.com Chemtrec 1-800-424-9300 Tom Tyner (USA - West Coast) Ibad Tirmiz (USA - 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)

Combustible dust

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

Component	CAS No	Weight-%
Microcrystalline Cellulose	9004-34-6	100

4.	FIRST	AID	MEASURES	
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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 effe	cts, both acute and delayed	
Symptoms	May cause eye/skin irritation May cause hypermotility, diarrhea	
Indication of any immediate medica	al 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		

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.

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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:

Special Protective Equipment for Firefighters:

No information available

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 up	Sweep up and shovel into suitable containers for disposal. Use only non-sparking tools. Clean contaminated surface thoroughly.		

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:

Strong oxidizing agents

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

National occupational exposure limits

United States

Component	CAS No	OSHA	NIOSH	ACGIH	AIHA WEEL
Microcrystalline Cellulose	9004-34-6	15 mg/m³ TWA 5 mg/m³ TWA	10 mg/m³ TWA 5 mg/m³ TWA	10 mg/m³ TWA	None

Canada

Component	CAS No	Canada - Alberta	Canada - British Columbia	Canada - Ontario	Canada - Quebec
Microcrystalline Cellulose	9004-34-6	10 mg/m³ TWA	10 mg/m ³ TWA total dust 3 mg/m ³ TWA respirable fraction	None	10 mg/m ³ TWAEV total dust

Australia and Mexico

Component	CAS No	Australia	Mexico
Microcrystalline Cellulose	9004-34-6	10 mg/m ³ TWA	10 mg/m ³ TWA
		_	20 mg/m ³ STEL

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

Product name: MICROCRYSTALLINE CELLULOSE, NF

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: Solid

Odor: Odorless.

Molecular/Formula weight (g/mole): Flammability (solid, gas) No information available

Flash Point Tested according to: Not available

Upper Explosion Limit (%): No information available

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

Specific gravity: No information available

Evaporation rate: No information available

Odor threshold (ppm): No information available

Miscibility: No information available

Chemical stability

Appearance: Microcrystalline solid powder.

Taste No information available.

no data available

Autoignition Temperature (°C/°F): No information available

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

Bulk density: No information available

bΗ No information available

Vapor density: No information available

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

Solubility: Slightly soluble in water Solubility in Water: no more than 0.25%

Color: White.

Formula No information available

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

Lower Explosion Limit (%): No information available

Decomposition temperature(°C/°F): 200°C/392°F

Density (g/cm3): 1.5

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

VOC content (g/L): No information available

Viscosity: No information available

10. STABILITY AND REACTIVITY

Reactivity Reactive with strong oxidizing agents

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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:	Strong oxidizing agents
Hazardous decomposition products:	Carbon monoxide. Carbon dioxide.

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

Microcrystalline Cellulose	
CAS No 9004-34-6	
LD50/oral/rat = > 5 g/kg Oral LD50 Rat	
LD50/oral/mouse = No information available	
LD50/dermal/rabbit = >2000 mg/kg	
LD50/dermal/rat = No information available	
LC50/inhalation/rat = 5800 mg/m ³ Inhalation LC50 Rat 4 h	
LC50/inhalation/mouse = No information available	
Other LD50 or LC50information = No information available	
Product Information	
LD50/oral/rat = Value - Acute Tox = > 5000 mg/kg	
LD50/oral/mouse = Value - Acute Tox Oral = No information available	
LD50/dermal/rabbit Value - Acute Tox = > 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/m ³ (rat, 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.

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Inhalation	May cause irritation of respiratory tract.
Ingestion	May cause hypermotility, diarrhea. Low hazard.
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 blood (thrombocytopenia). Prolonged or repeated ingestion may affect the blood (changes in clotting factors).
Sensitization:	No information available.
Mutagenic Effects:	No information available
Carcinogenic effects:	Not considered carcinogenic.

Component	CAS No	IARC	ACGIH - Carcinogens	NTP	OSHA HCS - Carcinogens	Australia - Notifiable Carcinogenic Substances	Australia - Prohibited Carcinogenic Substances
Microcrystalline Cellulose	9004-34-6	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	No information available.
STOT - repeated exposure	No information available.
Target Organs:	No information available.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Ecotoxicity effects:	No data available.
Persistence and degradability:	No information available
Bioaccumulative potential:	No information available.
Mobility in soil Other adverse effects	No information available No information available.

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

Component	CAS No	RCRA - F Series Wastes	RCRA - K Series Wastes	RCRA - P Series Wastes	RCRA - U Series Wastes
Microcrystalline Cellulose	9004-34-6	None	None	None	None

14. TRANSPORT INFORMATION

DOT	
UN-No:	Not Regulated
Proper Shipping Name:	No information available
Hazard Class	No information available
Subsidiary Class	No information available
Packing group:	No information available
Emergency Response Guide	No information available
Number	
Marine Pollutant	No data available
DOT RQ (lbs):	No information available
Special Provisions	No Information available
Symbol(s):	No information available
Description:	No information available
TDG (Canada)	Not Developed
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
Marine Pollutant	No Information available
Description:	No information available
ADR	
UN Number	Not regulated
Proper Shipping Name:	No information available
Transport hazard class(es)	No information available
Packing group	No information available
Subsidiary Risk:	No information available
-	
IMDG	
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
Marine Pollutant	No information available
RID	
UN Number	Not Regulated
Proper Shipping Name:	No information available
Product code: C1679	Product name: MICROCRYSTALLINE

CELLULOSE, NF

Transport hazard class(es) Subsidiary Risk: Packing group	No information available No information available No information available
ICAO (air) UN-No: Proper Shipping Name: Hazard Class Subsidiary Risk:	Not Regulated No information available No information available No information available
Packing Group:	No information available
ΙΑΤΑ	
UN Number	Not Regulated
Proper Shipping Name:	No information available
Transport hazard class(es)	No information available
Subsidiary Risk:	No information available
Packing group	No information available
Precautionary Statements - Response	No information available
Special Provisions	No information available

15. REGULATORY INFORMATION

International Inventories

Component	CAS No	U.S. TSCA	KOREA KECL	Philippines (PICCS)	Japan ENCS	China IECSC	Australia (AICS)	EINECS-No.
Microcrystalline	9004-34-6	PresentACTIV	Present	Present	Present	Present	Present	Present
Cellulose		E	KE-05339		(5)-6960			232-674-9

U.S. Regulations

Microcrystalline Cellulose Massachusetts RTK: Present New Jersey RTK Hazardous Substance List: 3227 Pennsylvania RTK: Present Minnesota - Hazardous Substance List: Present FDA - 21 CFR - Total Food Additives Present (not regulated under 21 CFR)

- List Sourced from EAFUS

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

<u>Chemicals Known to the State of California to Cause Cancer:</u> This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

<u>Chemicals Known to the State of California to Cause Reproductive Toxicity:</u> This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

Component	CAS No	Carcinogen	Developmental Toxicity	Male	Female
				Reproductive	Reproductive
				Toxicity	Toxicity:
Microcrystalline Cellulose	9004-34-6	Not Listed	Not Listed	Not Listed	Not Listed

CERCLA/SARA

Component	CAS No	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
Microcrystalline	9004-34-6	None	None	None	None	None

Cellulose

U.S. TSCA

Component		TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS)	TSCA 8(d) -Health and Safety Reporting
Microcrystalline Cellulose	9004-34-6	Not Applicable	Not Applicable

Canada

WHIMIS 2015 - GHS Classifications

WHMIS 2015 Hazard Classification Information:

Component Microcrystalline Cellulose 9004-34-6 (100) WHMIS 2015 Hazard Classification

Self-heating substances and mixtures - Undefined:; Combustible Dust - Category 1: May form combustible dust concentrations in air (factors such as combustibility and explosiveness of dusts including composition and shape and size of particles could cause substance to belong to 'Combustible dust' hazard class; under certain conditions material can self-heat by reaction with air and without energy supply)

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

DSL/NDSL

Component	CAS No	Canada (DSL)	Canada (NDSL)
Microcrystalline Cellulose	9004-34-6	Present	Not Listed

Component	CAS No	CEPA Schedule I - Toxic Substances
Microcrystalline Cellulose	9004-34-6	Not listed
Component	CAS No	CEPA - 2010 Greenhouse Gases Subject
		to Mandatory Reporting
Microcrystalline Cellulose	9004-34-6	Not listed

EU Classification

EU GHS - SV - CLP 1272/2008

Component	CAS No	EU GHS - SV - CLP (1272/2008)
Microcrystalline Cellulose	9004-34-6	

EU - CLP (1272/2008)

R-phrase(s)

not determined (not applicable)

S -phrase(s)

none

Component	CAS No	Classification	Concentration Limits:	Safety Phrases
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Product code: C1679

Microcrystalline Cellulose 900	004-34-6		No information	
The product is classified in accordance with Annex VI to Directive 67/548/EEC				

Indication of danger: Not dangerous

16. OTHER INFORMATION	
Preparation Date: Revision date Prepared by:	10/29/2015 5/14/2019 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