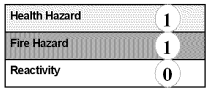
SPECTRUM®

GARDENA, CA
NEW BRUNSWICK, NJ

Material Safety Data Sheet

NFPA	HMIS	Personal Protective Equipment
		
		See Section 15.

Section 1. Chemical Product and Company Identification

Common Name/ Trade Name	**Cellulose**
Manufacturer	SPECTRUM LABORATORY PRODUCTS INC. 14422 S. SAN PEDRO STREET GARDENA, CA 90248
Commercial Name(s)	Not available.
Synonym	Cellulose, Microcrystalline
Chemical Name	Cellulose
Chemical Family	Not available.
Chemical Formula	POLYMER
Supplier	SPECTRUM LABORATORY PRODUCTS INC. 14422 S. SAN PEDRO STREET GARDENA, CA 90248

Catalog Number(s).	C1679, CE112, C1396
CAS#	9004-34-6
RTECS	FJ5691460
TSCA	TSCA 8(b) inventory: Cellulose
CI#	Not available.

IN CASE OF EMERGENCY
CHEMTREC (24hr) 800-424-9300

CALL (310) 516-8000

Section 2.Composition and Information on Ingredients

		Exposure Limits			
Name	CAS #	TWA (mg/m^3)	STEL (mg/m^3)	CEIL (mg/m^3)	% by Weight
1) Cellulose	9004-34-6	10			100

Toxicological Data on Ingredients Not applicable.

Section 3. Hazards Identification

Potential Acute Health Effects Slightly hazardous in case of eye contact (irritant), of ingestion, of inhalation. Non-irritant for skin.

Potential Chronic Health Effects

CARCINOGENIC EFFECTS: Not available.
MUTAGENIC EFFECTS: Not available.
TERATOGENIC EFFECTS: Not available.
DEVELOPMENTAL TOXICITY: Not available.
Repeated or prolonged exposure is not known to aggravate medical condition.

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Section 4. First Aid Measures

Eye Contact	Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation occurs.
Skin Contact	Wash with soap and water. Get medical attention if irritation develops.
Serious Skin Contact	Not available.
Inhalation	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention if symptoms appear.
Serious Inhalation	Not available.
Ingestion	Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if symptoms appear.
Serious Ingestion	Not available.

Section 5. Fire and Explosion Data

Flammability of the Product	May be combustible at high temperature.
Auto-Ignition Temperature	Not available.
Flash Points	Not available.
Flammable Limits	Not available.
Products of Combustion	Not available.
Fire Hazards in Presence of Various Substances	Slightly flammable to flammable in presence of open flames and sparks, of heat. Non-flammable in presence of shocks.
Explosion Hazards in Presence of Various Substances	Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available.
Fire Fighting Media and Instructions	SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use water spray, fog or foam. Do not use water jet.
Special Remarks on Fire Hazards	Damp cellulose can be a significant fire hazard since it may underto spontaneous combustion. Fire and explosions may occur from reactions involving pentafluoride, acetic acid and cellulose. Contact between cellulose and sodium nitrite at elevated temperatures results in vigorous burning from decompositon reaction.
Special Remarks on Explosion Hazards	Fire and explosions may occur from reactions involving pentafluoride, acetic acid and cellulose. Contact between cotton and fluorine may result in violent explosion. Excess dust generation may create explosion hazard.

Section 6. Accidental Release Measures

Small Spill	Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.
Large Spill	Use a shovel to put the material into a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.

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TDG (Canada) (Pictograms)	
ADR (Europe) (Pictograms)	
Protective Equipment	 Gloves (impervious).  Lab coat. Not applicable.  Safety glasses.

Section 16. Other Information

MSDS Code	C3755
References	Not available.
Other Special Considerations	Not available.

Validated by Sonia Owen on 8/11/2006.	**Verified by Sonia Owen.** **Printed 9/11/2006.**

CALL (310) 516-8000

Notice to Reader

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. 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 Quality Products, Inc. assumes no responsibility for the completeness or accuracy of the information contained herein.

Section 7. Handling and Storage

Precautions	Keep away from heat. Keep away from sources of ignition. Empty containers pose a fire risk, evaporate the residue under a fume hood. Ground all equipment containing material. Do not ingest. Do not breathe dust. If ingested, seek medical advice immediately and show the container or the label.
Storage	Keep container tightly closed. Keep container in a cool, well-ventilated area. Do not store above 25°C (77°F).

Section 8. Exposure Controls/Personal Protection

Engineering Controls	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.
Personal Protection	Safety glasses. Lab coat. Gloves (impervious).
Personal Protection in Case of a Large Spill	Splash goggles. Full suit. Boots. Gloves. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.
Exposure Limits	TWA: 10 (mg/m^3) from ACGIH (TLV) [United States] Inhalation Total. TWA: 10 (mg/m^3) from British Columbia Occupational Exposure Limit [Canada] Inhalation Total. TWA: 3 from British Columbia Occupational Exposure Limit [Canada] Inhalation Respirable. TWA: 5 (mg/m^3) from OSHA (PEL) [United States] Inhalation Respirable. TWA: 15 (mg/m^3) from OSHA (PEL) [United States] Inhalation Total. TWA: 10 STEL: 20 (mg/m^3) [United Kingdom (UK)] Inhalation Total. TWA: 4 (mg/m^3) [United Kingdom (UK)] Inhalation Respirable. Consult local authorities for acceptable exposure limits.

Section 9. Physical and Chemical Properties

Physical state and appearance	Solid. (A polymer consisting of linked glucose units (cellobiose) in unbranched linear chains. It may exist as a fibrous or white crystalline solid. Microcrystalline cellulose consists of rigid rods. It is the main constituent of plant fiber.)	**Odor**	Odorless.
Molecular Weight	Not available.	**Taste**	Tasteless.
pH (1% soln/water)	Not applicable.	**Color**	Off-white.
Boiling Point	Decomposes.		
Melting Point	500°C (932°F) - 518 C		
Critical Temperature	Not available.		
Specific Gravity	1.27 - 1.61@ 0 C (32 F)(Water = 1) 0.28-.032 (temperature not listed)		
Vapor Pressure	Not applicable.		
Vapor Density	Not available.		
Volatility	Not available.		
Odor Threshold	Not available.		
Water/Oil Dist. Coeff.	Not available.		
Ionicity (in Water)	Not available.		
Dispersion Properties	Not available.		
Solubility	Insoluble in cold water, hot water. Insoluble in organic solvents. It will swell in dilute alkaline solutions such as sodiuim hydroxide and will dissolve in caustic alkali with carbon disulfide. It is soluble in ammoniacal copper hydroxide solution (Schweitzer's reagent) and concentrated zinc chloride solution.		

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Section 10. Stability and Reactivity Data

Stability	The product is stable.
Instability Temperature	Not available.
Conditions of Instability	Excess heat, incompatible materials
Incompatibility with various substances	Not available.
Corrosivity	Non-corrosive in presence of glass.
Special Remarks on Reactivity	Not available.
Special Remarks on Corrosivity	Not available.
Polymerization	Will not occur.

Section 11. Toxicological Information

Routes of Entry	Inhalation. Ingestion.
Toxicity to Animals	**WARNING: THE LC50 VALUES HEREUNDER ARE ESTIMATED ON THE BASIS OF A 4-HOUR EXPOSURE.** Acute oral toxicity (LD50): >5000 mg/kg [Rat]. Acute dermal toxicity (LD50): >2000 mg/kg [Rabbit]. Acute toxicity of the dust (LC50): 5800 mg/m^3 4 hours [Rat].
Chronic Effects on Humans	Not available.
Other Toxic Effects on Humans	Slightly hazardous in case of ingestion, of inhalation. Non-irritant for skin.
Special Remarks on Toxicity to Animals	Not available.
Special Remarks on Chronic Effects on Humans	Not available.
Special Remarks on other Toxic Effects on Humans	Acute Potential Health Effects: Skin: It is not known to cause skin irritation. Ingestion: Ingestion of large amounts of cellulose may cause digestive tract irritation. Eyes: Dust may cause mechanical irritation. To the best of our knowledge, there are no known cases of adverse effects or disease in humans from exposure to cellulose. Health effects from cotton fibers, wood, flax, jute, and hemp are usually due to other substances. Purified cellulose is known to be essentially inert. Pure cellulose dust is not known to be irritating or toxic. Chronic Potential Health Effects: Chronic inhalation from cellulose-containing fibers can cause byssinosis. Allergies can develop to cellulose-containing fibers, but these are probably due to plant proteins or other components. In chronic feeding studies with purified celulose in mice and rats, no significant adverse reactions were seen.

Section 12. Ecological Information

Ecotoxicity	Not available.
BOD5 and COD	Not available.
Products of Biodegradation	Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.
Toxicity of the Products of Biodegradation	The product itself and its products of degradation are not toxic.

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Special Remarks on the Products of Biodegradation	Not available.

Section 13. Disposal Considerations

Waste Disposal	Waste must be disposed of in accordance with federal, state and local environmental control regulations.

Section 14. Transport Information

DOT Classification	Not a DOT controlled material (United States).
Identification	Not applicable.
Special Provisions for Transport	Not applicable.
DOT (Pictograms)	

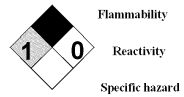
Section 15. Other Regulatory Information and Pictograms

Federal and State Regulations	Illinois toxic substances disclosure to employee act: Cellulose Rhode Island RTK hazardous substances: Cellulose Pennsylvania RTK: Cellulose Minnesota: Cellulose Massachusetts RTK: Cellulose TSCA 8(b) inventory: Cellulose
California Proposition 65 Warnings	
Other Regulations	EINECS: This product is on the European Inventory of Existing Commercial Chemical Substances.
Other Classifications	**WHMIS (Canada)**: Not controlled under WHMIS (Canada). **DSCL (EEC)**: This product is not classified according to the EU regulations. Not applicable.

HMIS (U.S.A.)

Health Hazard	1
Fire Hazard	1
Reactivity	0
Personal Protection	B

National Fire Protection Association (U.S.A.)



WHMIS (Canada) (Pictograms)

DSCL (Europe) (Pictograms)

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