



SAFETY DATA SHEET

Preparation Date: 4/14/2014	Revision Date: 4/14/2014	Revision Number: G1				
1. IDENTIFICATION						
Product identifier						
Product code:	S1493					
Product Name:	SPIRULINA, 100 MESH, POWDER					
Other means of identification						
Synonyms:	No information available					
CAS #:	No CAS number					
RTECS #	Not available					
CI#:	Not available					
Recommended use of the che	mical 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)					
Contact Person:	Regina Wachenheim (East Coast)					

2. HAZARDS IDENTIFICATION

Classification

This chemical is not 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)

Label elements

Not classified

Hazards not otherwise classified (HNOC) Not Applicable

Other hazards Not available

3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No.	Weight %	Trade Secret
Spirulina	NCAS	100	*
NCAS			

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 effect	ts, both acute and delayed

Symptoms May cause eye/skin irritation.

Indication of any immediate medical attention and special treatment neededNotes 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. 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. Avoid dust formation. Remove all sources of ignition.				
Environmental precautions	No information available.				
Methods and material for conta	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. 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. Avoid dust formation. All equipment used when handling the product must be grounded. 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:

Strong oxidizing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

National occupational exposure limits

U.S Occupational Exposure Limits: Not determined

United States

Components	OSHA	NIOSH	ACGIH	AIHA WHEEL
	None	None	None	None
Spirulina - NCAS				

Canada

Canada Occupational Exposure Limits: Not determined

Components	Alberta	British Columbia	Ontario	Quebec	
	None	None	None	None	
Spirulina - NCAS					

Australia and Mexico

Occupational Exposure Limits for Australia and Mexico: Not determined

Components	Australia	Mexico
Spirulina NCAS	None	None

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.

Individual protection measures, such as personal protective equipment

Personal Protective Equipment

Eye protection:	Safety glasses. 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

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Physical state: Solid.

Odor: Characteristic. seaweed-like.

Flash point (°C): Not applicable

Lower Explosion Limit (%): No information available

pH: No information available

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

Bulk density: No information available

Vapor density: No information available

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

Solubility: Very slightly soluble in water Appearance: Powder.

Taste No information available

Flashpoint (°C/°F): Not applicable

Upper Explosion Limit (%): No information available

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

Specific gravity: No information available

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

VOC content (g/L): No information available

Viscosity: No information available Color: Green.

Molecular/Formula weight: No information available

Flash Point Tested according to: Not applicable

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

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

Density (g/cm3): No information available

Evaporation rate: No information available

Odor threshold (ppm): No information available

Miscibility: No information available

10. STABILITY AND REACTIVITY

Reactivity Reactive with oxidizing agents	
<u>Chemical stability</u> Stability:	Stable at normal conditions
Possibility of Hazardous Reactions:	Hazardous polymerization does not occur
Conditions to avoid:	Heat. Avoid dust formation. 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.
Other Information	
Corrosivity:	No information available
Special Remarks on Corrosivity:	No information available

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product code: S1493

Principal Routes of Exposure: Ingestion. Inhalation.

Acute Toxicity

Component Information

Spirulina - NCAS

LD50/oral/rat = No information available LD50/oral/mouse = No information available LD50/dermal/rabbit = No information available LD50/dermal/rat = No information available LC50/inhalation/rat = No information available LC50/inhalation/mouse = No infomation available Other LD50 or LC50information = No information available

Product Information

LD50/oral/rat = VALUE- Acute Tox Oral = No information available

LD50/oral/mouse = Value - Acute Tox Oral = No information available

LD50/dermal/rabbit VALUE-Acute Tox Dermal = No information available

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 = No information available

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 Ingestion	May cause irritation of respiratory tract. No information available. Low hazard. Health injuries are not known or expected under normal use.
Aspiration hazard	No information available
Delayed and immediate effects a	s well as chronic effects from short and long-term exposure
Chronic Toxicity Sensitization:	No information available No information available

Mutagenic Effects:

No information available

Carcinogenic effects:

Not considered carcinogenic

Components	ACGIH - Carcinogens	IARC	NTP	OSHA HCS - Carcinogens	Australia - Prohibited Carcinogenic Substances	Australia - Notifiable Carcinogenic Substances
Spirulina	Not listed	Not listed	Not listed	Not listed	Not listed	Not listed

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:	No information available

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

Components	RCRA - F Series Wastes	RCRA - K Series Wastes	RCRA - P Series Wastes	RCRA - U Series Wastes
Spirulina	None	None	None	None

14. TRANSPORT INFORMATION

DOT

14. TRANSPORT INFORMATION

UN-No: **Proper Shipping Name:** Hazard Class: Subsidiary Risk: Packing Group: Marine Pollutant ERG No: DOT RQ (lbs):

TDG (Canada)

UN-No: **Proper Shipping Name:** Hazard Class: Subsidiary Risk: Packing Group: **Description:**

ADR

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

IMO / IMDG

UN-No: **Proper Shipping Name:** Hazard Class: Subsidiary Risk: Packing Group: **Description:** IMDG Page: Marine Pollutant MFAG: **Maximum Quantity:**

RID

UN-No: **Proper Shipping Name:** Hazard Class: Subsidiary Risk: Packing Group: **Classification Code: Description:**

ICAO

UN-No: **Proper Shipping Name:** Hazard Class: Subsidiary Risk: Packing Group: **Description:**

Not regulated No information available No information available Not applicable None No data available No information available No information available

Not regulated No information available No information available No information available No information available No information available

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Not regulated

No information available No information available

Not regulated

No information available No information available

Not regulated

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

ΙΑΤΑ

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

Components	U.S. TSCA	KOREA KECL	Philippines (PICCS)	Japan ENCS	CHINA	Australia (AICS)	EINECS-No.
Spirulina	Not Listed	Not present	Not present	Not present	Not present	Not present	Not present

U.S. Regulations

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		Female Reproductive Toxicity:
Spirulina	Not Listed	Not Listed	Not Listed	Not Listed

CERCLA/SARA

	CERCLA - Hazardous Substances and their	Section 302 Extremely Hazardous	Section 302 Extremely Hazardous	Section 313 - Chemical Category	Section 313 - Reporting de minimis
	Reportable Quantities	Substances and TPQs	Substances and RQs	•••	
Spirulina	None	None	None	None	None

U.S. TSCA

	TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS)	TSCA 8(d) -Health and Safety Reporting
Spirulina	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)
Spirulina	Not Listed	Not Listed

Components	CEPA Schedule I - Toxic Substances	CEPA - 2010 Greenhouse Gases Subject to Manditory Reporting
Spirulina	Not listed	Not listed

EU Classification

R-phrase(s) not determined

S -phrase(s) none

Components	Classification	Concentration Limits:	Safety Phrases
Spirulina		No information	

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

Indication of danger: Not dangerous

16. OTHER INFORMATION

16. OTHER INFORMATION		
NFPA	HMIS	Personal Protective Equipment
	Health Hazard1Fire Hazard1Reactivity0	
		See Section 8.

4/14/2014

4/14/2014 Sonia Owen

Preparation Date: Revision Date: Prepared by:

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 Material Safety Data Sheet