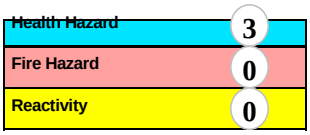
GARDENA, CA
NEW BRUNSWICK, NJ

Material Safety Data Sheet

NFPA	HMIS	Personal Protective Equipment
		 See Section 15.

Section 1. Chemical Product and Company Identification

Common Name/ Trade Name	**Sodium Metasilicate, Nonahydrate**
Manufacturer	SPECTRUM LABORATORY PRODUCTS INC. 14422 S. SAN PEDRO STREET GARDENA, CA 90248
Commercial Name(s)	Water Glass; Crysmet
Synonym	Silicic acid (H2SiO3), disodium salt, nonahydrate; Disodium metasilicate, nonahydrate; Sodium Metasilicate, nonahydrate; Disodium trioxosilicate, nonahydrate; Sodium silicate, nonahydrate
Chemical Name	Silicic acid , sodium salt, nonahydrate
Chemical Family	Not available.
Chemical Formula	Na2-Si-O3.9H2O
Supplier	SPECTRUM LABORATORY PRODUCTS INC. 14422 S. SAN PEDRO STREET GARDENA, CA 90248

Catalog Number(s).	S1337
CAS#	13517-24-3
RTECS	VV9275000 (for Sodium Metasilicate, anhydrous - CAS no. 6834-92-0)
TSCA	TSCA 8(b) inventory: No products were found. It exempt from TSCA 8(b) Inventory listing since it is a hydrate. However the anhydrous form (CAS no. 6834-92-0) is listed on the TSCA 8(b) inventory.
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) Sodium Metasilicate, Nonahydrate	13517-24-3				100

Toxicological Data on Ingredients

Sodium meta-Silicate, anydrous (CAS no. 6834-92-0):
ORAL (LD50): Acute: 1153 mg/kg [Rat]. 770 mg/kg [Mouse]. (Registry of Toxic Effects of Chemical Substances)
ORAL (LD50): Acute: 1280 mg/kg [Rat]. 2400 mg/kg [Mouse]. (Hazardous Substance Data Bank)

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Section 3. Hazards Identification

Potential Acute Health Effects	Very hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion. Hazardous in case of skin contact (corrosive), of eye contact (corrosive), of inhalation. The amount of tissue damage depends on length of contact. Eye contact can result in corneal damage or blindness. Skin contact can produce inflammation and blistering. Inhalation of dust will produce irritation to gastro-intestinal or respiratory tract, characterized by burning, sneezing and coughing. Severe over-exposure can produce lung damage, choking, unconsciousness or death. Inflammation of the eye is characterized by redness, watering, and itching. Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering.
Potential Chronic Health Effects	**CARCINOGENIC EFFECTS**: Not available. **MUTAGENIC EFFECTS**: Not available. **TERATOGENIC EFFECTS**: Not available. **DEVELOPMENTAL TOXICITY**: Not available. The substance may be toxic to mucous membranes, skin, eyes. Repeated or prolonged exposure to the substance can produce target organs damage. Repeated exposure of the eyes to a low level of dust can produce eye irritation. Repeated skin exposure can produce local skin destruction, or dermatitis. Repeated inhalation of dust can produce varying degree of respiratory irritation or lung damage.

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. Cold water may be used. Get medical attention immediately.
Skin Contact	In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Cover the irritated skin with an emollient. Cold water may be used.Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.
Serious Skin Contact	Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek medical attention.
Inhalation	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.
Serious Inhalation	Evacuate the victim to a safe area as soon as possible. Loosen tight clothing such as a collar, tie, belt or waistband. If breathing is difficult, administer oxygen. If the victim is not breathing, perform mouth-to-mouth resuscitation. WARNING: It may be hazardous to the person providing aid to give mouth-to-mouth resuscitation when the inhaled material is toxic, infectious or corrosive. Seek immediate medical attention.
Ingestion	Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.
Serious Ingestion	Not available.

Section 5. Fire and Explosion Data

Flammability of the Product	Non-flammable.
Auto-Ignition Temperature	Not applicable.
Flash Points	Not applicable.
Flammable Limits	Not applicable.
Products of Combustion	Not available.
Fire Hazards in Presence of Various Substances	Not applicable.
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	Not applicable.
Special Remarks on Fire Hazards	Sodium metasilicate ignites in Fluorine
Special Remarks on Explosion Hazards	Not available.

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Section 6. Accidental Release Measures

Small Spill	Use appropriate tools to put the spilled solid in a convenient waste disposal container. If necessary: **Neutralize the residue with a dilute solution of acetic acid.**
Large Spill	Corrosive solid. Stop leak if without risk. Do not get water inside container. Do not touch spilled material. Use water spray to reduce vapors. Prevent entry into sewers, basements or confined areas; dike if needed. Call for assistance on disposal. **Neutralize the residue with a dilute solution of acetic acid.**

Section 7. Handling and Storage

Precautions	Keep container dry. Do not breathe dust. In case of insufficient ventilation, wear suitable respiratory equipment. If you feel unwell, seek medical attention and show the label when possible. Avoid contact with skin and eyes. Keep away from incompatibles such as metals, acids.
Storage	Keep container tightly closed. Keep container in a cool, well-ventilated area.

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	Splash goggles. Synthetic apron. Vapor and dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.
Personal Protection in Case of a Large Spill	Splash goggles. Full suit. Vapor and dust respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.
Exposure Limits	Not available.

Section 9. Physical and Chemical Properties

Physical state and appearance	Solid. (Crystals solid.)
Molecular Weight	284.2 g/mole
pH (1% soln/water)	13 [Basic.]

Odor	Not available.
Taste	Not available.
Color	White.

Boiling Point	100℃ (212℉)
Melting Point	48℃ (118.4℉) in water of crystallization.
Critical Temperature	Not available.
Specific Gravity	Not available.
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	See solubility in water.
Solubility	Easily soluble in cold water, hot water. Soluble in dilute Sodium Hydroxide. Insoluble in alcohol, acids.

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Section 10. Stability and Reactivity Data

Stability	The product is stable.
Instability Temperature	Not available.
Conditions of Instability	Incompatible materials
Incompatibility with various substances	Reactive with metals, acids.
Corrosivity	Extremely corrosive in presence of aluminum. Slightly corrosive in presence of copper. Non-corrosive in presence of stainless steel(304), of stainless steel(316).
Special Remarks on Reactivity	Solutions of sodium metasilicate, when heated and acidified, are hydrolyzed to free sodium and silicic acid. Corrosive to metals like zinc, tin, lead. It forms hydrogen gas on contact with metals
Special Remarks on Corrosivity	Corrosive to metals like zinc, tin, lead.
Polymerization	Will not occur.

Section 11. Toxicological Information

Routes of Entry	Inhalation. Ingestion.
Toxicity to Animals	LD50: Not available. LC50: Not available.
Chronic Effects on Humans	May cause damage to the following organs: mucous membranes, skin, eyes.
Other Toxic Effects on Humans	Very hazardous in case of skin contact (irritant), eye contact (irritant), of ingestion. Hazardous in case of skin contact (corrosive), of eye contact (corrosive), of inhalation
Special Remarks on Toxicity to Animals	Not available.
Special Remarks on Chronic Effects on Humans	May cause adverse reproductive effects based on animal test data.
Special Remarks on other Toxic Effects on Humans	Acute Potential Health Effects: Skin: Corrosive. Causes severe irritation with redness and pain, and burns. Eyes: Corrosive. Causes severe irritation with redness, conjuctivitis, pain, lachrymation, and burns. Causes corneal damage with opacificaton. May cause blindness. Inhalation: Causes irritation of the respiratory tract. May cause chemicals burns to the respiratory tract. Ingestion: Corrosive. Harmful if swallowed. Causes nausea, vomiting, severe gastrointestinal tract irritation. pain in the throat, abdominal pain, drooling, difficulty swallowing, May cause ulceration and bleeding from the stomach and small intestine. May cause oral, esophageal or gastric burns. May cause burns of the epiglottis, and vocal cords, and laryngeal obstruction. May cause esophageal or gastric perforation. It may affect the kidneys. Chronic Potential Health Effects: Skin: Prolonged or repeated skin contact causes allergic contact dermatitis. Ingestion: Prolonged or repeated ingestion may lead to inflammation and ulceration of the mouth. Prolonged or repeated ingestion may affect the kidneys

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.
Special Remarks on the Products of Biodegradation	Not available.

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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 Class 8: Corrosive material

Identification UNNA: 3253 : Disodium trioxosilicate PG: III

Special Provisions for Transport Passenger Aircraft/Railcar (Maximum Quantity): 25 kg
Cargo Aircraft (Maximum Quantity): 100 kg.

DOT (Pictograms)

Section 15. Other Regulatory Information and Pictograms

Federal and State Regulations No products were found.

California Proposition 65 Warnings California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer which would require a warning under the statute: No products were found.

California prop. 65: This product contains the following ingredients for which the State of California has found to cause birth defects which would require a warning under the statute: No products were found.

Other Regulations OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).EINECS: This product is not on the European Inventory of Existing Commercial Chemical Substances.
Canada: Not listed on Canadian Domestic Substance List (DSL) or Canadian Non- Domestic Substance List (NDSL).
China: Listed on National Inventory.
Japan: Listed on National Inventory (ENCS).
Korea: Not listed on National Inventory (KECI).
Philippines: Listed on National Inventory (PICCS).
Australia: Not listed on AICS.

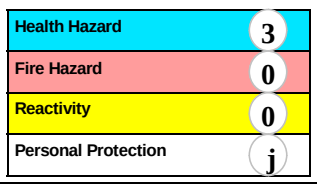
Other Classifications

WHMIS (Canada) CLASS E: Corrosive solid.

DSCL (EEC) R34- Causes burns.
R37- Irritating to respiratory system.

S13- Keep away from food, drink and animal feedingstuffs.
S24/25- Avoid contact with skin and eyes.
S36/37/39- Wear suitable protective clothing, gloves and eye/face protection.
S45- In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

HMIS (U.S.A.)



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

Flammability
Health
Reactivity
Specific hazard

WHMIS (Canada) (Pictograms)

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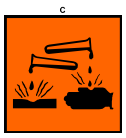
DSCL (Europe) (Pictograms)



TDG (Canada) (Pictograms)

ADR (Europe) (Pictograms)

Protective Equipment

Gloves.

Synthetic apron.

Vapor and dust respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate.

Splash goggles.

Section 16. Other Information

MSDS Code	**S4190**
References	Not available.
Other Special Considerations	Not available.

Validated by Sonia Owen on 12/9/2011.

Verified by Sonia Owen.

Printed 12/9/2011.

CALL (310) 516-8000

Notice to Reader