



Material Safety Data Sheet

Section 1. Chemical Product and Company Identification

Product name NATURAL
Product use Cleaner. Disinfectant. Deodorizer
Product code 0677
Date of issue 12/30/10 **Supersedes** 03/26/08

Emergency Telephone Numbers

For MSDS Information:

Technical Services Group
Telephone (780) 453-8100
(Business Hours 8:00am - 5:00pm)

For Medical or Transportation Emergency

CANUTEC (24 Hours)
(613) 996-6666 - Call Collect

Prepared By

Technical Services Group
11627 178th Street
Edmonton, Alberta T5S 1N6

Printing date: 30/12/10

Section 2. Hazards Identification

Emergency overview

DANGER !

CAUSES EYE BURNS. CAUSES SKIN IRRITATION. MAY BE HARMFUL IF SWALLOWED.

Do not breathe vapor or mist. Do not ingest. Do not get in eyes or on skin or clothing.
Use only with adequate ventilation. Wash thoroughly after handling.

NOTE: MSDS data pertains to the product as delivered in the original shipping container(s). Risk of adverse effects are lessened by following all prescribed safety precautions, including the use of proper personal protective equipment.

Acute Effects

Routes of Entry

Dermal contact. Eye contact.

Eyes

Corrosive to eyes. Causes burns. Direct contact with the eyes can cause irreversible damage, including blindness.

Skin

Irritating to skin. Skin inflammation is characterized by itching, scaling, or reddening.

Inhalation

Over-exposure by inhalation may cause respiratory irritation.

Ingestion

Harmful if swallowed. May cause burns to mouth, throat and stomach.

Chronic effects

Repeated eye exposure may produce chronic inflammation of the eye or corneal damage.
Prolonged or repeated contact with skin or mucous membrane may result in irritation symptoms, such as redness, blistering, dermatitis etc.

Additional Information: See Toxicological Information (Section 11)

Section 3. Composition/Information on Ingredients

Name of Hazardous Ingredients

CAS number

% by Weight

SODIUM METASILICATE; silicic acid (H ₂ -Si-O ₃) disodium salt; water glass	6834-92-0	1 - 5
QUATERNARY AMMONIUM CHLORIDES; blend of alkyl dimethylbenzyl ammonium chlorides, alkyl dimethyl ethylbenzyl ammonium chlorides, and ethanol	85409-23-0; 68391-01-5	1 - 5
TETRASODIUM ETHYLENEDIAMINE TETRAACETATE; ethylenediamine tetraacetic acid; tetrasodium salt	64-02-8	1 - 5
TETRAPOTASSIUM PYROPHOSPHATE; tkpp; diphosphoric acid, tetrapotassium salt	7320-34-5	1 - 5

Section 4. First Aid Measures

Eye Contact

Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician.

Skin Contact

Flush affected skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing or wear gloves. Continue to rinse for at least 10 minutes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention if symptoms appear.

Inhalation

Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Get medical attention.

Ingestion Get medical attention immediately. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Never give anything by mouth to an unconscious person. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Chemical burns must be treated promptly by a physician.

Section 5. Fire Fighting Measures

Flash Point Not available.

Flammable Limits Not available.

Flammability Non-combustible.

Auto-ignition Temperature

Fire-Fighting Procedures Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. In case of fire, use water spray (fog), foam, dry chemical or CO₂.

Fire hazard In a fire or if heated, a pressure increase will occur and the container may burst.

Products of Combustion May emit toxic fumes under fire conditions. carbon oxides (CO, CO₂)

Explosion hazard Not available.

Section 6. Accidental Release Measures

Spill Clean up Put on appropriate personal protective equipment (see section 8). Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble or absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Section 7. Handling and Storage

Handling Put on appropriate personal protective equipment (see section 8). Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Wash thoroughly after handling.

Storage Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Store between the following temperatures: 40°F - 120°F (4.4°C - 49°C). Separate from acids. Keep away from oxidizing agents. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Keep out of the reach of children.

Section 8. Exposure Controls/Personal Protection

Product name

Sodium Metasilicate

Exposure limits

Supplier Suggested (United States).
CEIL: 2 mg/m³ Form:

Personal Protective Equipment (PPE)

Eyes Recommended: Splash goggles.

Hands and Body Recommended: Neoprene gloves. Nitrile gloves. Rubber gloves.

Respiratory Use with adequate ventilation. A respirator is not needed under normal and intended conditions of product use.



Section 9. Physical and Chemical Properties

Physical State	Liquid.	Color	Clear. Colorless.
pH	12.9	Odor	Odorless.
Boiling Point	101°C (213.8°F)	Vapor Pressure	Not determined.
Specific Gravity	1.08	Vapor Density	Not determined.
Solubility	Easily soluble in the following materials: cold water and hot water.	Evaporation Rate	1 (Water = 1)
Freezing Point		VOC (Consumer)	2 (g/l). 0.2%

Section 10. Stability and Reactivity

Stability and Reactivity The product is stable.

Incompatibility Reactive or incompatible with the following materials: oxidizing materials. acids

Hazardous Polymerization Will not occur.

Hazardous Decomposition Products Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological Information

Carcinogenicity Ingredients: Not listed as carcinogen by OSHA, NTP or IARC.

Acute Toxicity

Product/ingredient name	Result	Species	Dose	Exposure
disodium metasilicate	LD50 Oral	Mouse	770 mg/kg	-
	LD50 Oral	Rat	>1000 mg/kg	-
	LD50 Oral	Rat	1153 mg/kg	-
Quaternary Ammonium Chlorides	LD50 Dermal	Rabbit	>2000 mg/kg	-
	LD50 Oral	Rat	>500 mg/kg	-
Tetrasodium Ethylenediamine Tetraacetate	LD50 Oral	Rat	4100 mg/kg	-

Section 12. Ecological Information

Environmental Effects No known significant effects or critical hazards.


Aquatic Ecotoxicity

Product/ingredient name	Test	Result	Species	Exposure
Quaternary Ammonium Chlorides	-	Acute EC50 0.058 mg/L	Daphnia	48 hours
	-	Acute LC50 0.52 mg/L	Fish - Bluegill.	96 hours

Section 13. Disposal Considerations**Waste Information**

Waste must be disposed of in accordance with applicable regulations. Consult your local or regional authorities for additional information.

Waste Stream**Section 14. Transport Information**

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label	Additional information
TDG Classification	1903	Disinfectant, Liquid, Corrosive, n.o.s. (Quaternary Ammonium Chlorides)	8	II		<u>Explosive Limit and Limited Quantity Index</u> 1
IMDG Class	Not available.	Not available.	Not available.	-		-

NOTE: DOT classification applies to most package sizes. For specific container size classifications or for size exceptions, refer to the Bill of Lading with your shipment. Limited Quantity: Small quantities of controlled goods are not regulated as Dangerous Goods according to TDG regulations.

PG* : Packing group

Section 15. Regulatory Information**Canada****WHMIS (Canada)**

Not controlled under WHMIS (Canada). Regulated under other Act

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

Section 16. Other Information

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.