A Division of Appropriate Chemical International Ltd.

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MATERIAL SAFETY DATA SHEET

PRODUCT NAME: Sodium Silicate SO400-00

SECTION 01: PRODUCT INFORMATION AND COMPANY INFORMATION

MANUFACTURER: Same as above
PREPARED BY: Production Department
VERSION DATE: 07-Mar-16
TELEPHONE NO.: (519) 451-1614
EMERGENCY PHONE NO.: (613) 996-6666
CHEMICAL FAMILY Not Available **CHEMICAL FORMULA** Not Applicable
MOLECULAR WEIGHT Not Applicable **MATERIAL USE:** Adhesive, binder, pulp & paper, water treatment, catalysts & gels.
SYNONYMS:

SECTION 02: COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous Ingredients	Conc. Approx. %	C.A.S. #	LD/50 (RTE/SPEC)	LC/50 (RTE/SPEC)	TLV
Sodium Silicate	37.5	1344-09-8	1960 mg/kg	N.Av.	N.Av.
Water	62.5	7732-18-5	N.Av.	N.Av.	N.Av.

SECTION 03: HAZARD IDENTIFICATION

ROUTE OF ENTRY

Eyes: Causes eye irritation.

Skin: Causes moderate skin irritation.

Inhalation Mists may cause irritation of upper respiratory tract.

Ingestion: May cause irritation to mouth, esophagus and stomach. Causes digestive tract irritation.

SECTION 04: FIRSTAID

Skin Contact: In case of contact, immediately flush skin with plenty of water for at least 15 minutes. Get medical attention. Immediately remove contaminated clothing and shoes.

Eye Contact: In case of contact, or suspected contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention immediately after flushing.

Inhalation, Acute Remove person to fresh air. If not breathing, give artificial respiration. If breathing is difficult, get immediate medical attention.

Ingestion: Do not induce vomiting. Never give fluids or induce vomiting if the victim is unconscious or having convulsions.

Notes to physician: Treat symptomatically.

SECTION 05: FIRE EXPLOSION HAZARD AND FIRE FIGHTING MEASURES

FLAMMABLE? No
IF YES, UNDER WHICH CONDITIONS? Not Applicable

FLASH POINT (TCC) (C):	Not Applicable
FLAMMABLE LIMITS:	**LEL(% BY VOL.):** Not Applicable **UEL(% BY VOL):** Not Applicable
AUTO IGNITION TEMPERATURE (C)	Not Applicable
EXTINGUISHING MEDIA	Use extinguishing media appropriate for surrounding fire.
SPECIAL PROCEDURES:	Fire fighters should wear full protective clothing, including self-contained breathing equipment
HAZARDOUS COMBUSTION PRODUCTS:	
UNUSUAL FIRE AND EXPLOSION HAZARDS	Not Applicable
SENSITIVITY TO STATIC DISCHARGE	Not Available
SENSITIVITY TO MECHANICAL IMPACT:	Not Available

SECTION 06: ACCIDENTAL RELEASE MEASURES

Leak and Spill Procedure: Personal Precautionary Measures: Wear appropriate protective equipment.
Environmental Precautionary Measures: Prevent entry into sewers or streams, dike if needed. Consult local authorities.
Procedure for Clean Up: Absorb with an inert dry material and place in an appropriate waste disposal container. Isolate hazard area and restrict access. Stop leak only if safe to do so. Prevent spilled material from entering sewers, confined spaces, drains, or waterways. Neutralize contamination area and flush with large quantities of water. Spilled material may cause floors and contact surfaces to become slippery.

SECTION 07: HANDLING AND STORAGE

Handling Procedures and Storage Requirements

Handling: Avoid contact with eyes, skin and clothing. Avoid breathing vapor. Promptly clean residue from closures with cloth dampened with water.
Storage: Keep containers tightly closed. Store between 0°C and 95 °C. Store in clean stainless steel or plastic containers. Do not store in aluminum, fiberglass, copper, brass, zinc or galvanized containers. Loading temperature 45 - 95 C. Separate from acids, reactive metals and ammonium salts.

SECTION 08: PERSONAL PROTECTIVE EQUIPMENT / EXPOSURE CONTROLS

GLOVES/TYPE:	Impervious gloves.
RESPIRATOR/TYPE:	For dusty or misty conditions, wear NIOSH-approved dust or mist respirator.
EYE/TYPE:	Monogoggles
OTHER/TYPE:	Ensure that eyewash stations and safety showers are proximal to the work-station location.
ENGINEERING CONTROL	Local ventilation recommended where mechanical ventilation is ineffective in controlling airborne concentrations below the recommended occupational exposure limit.

SECTION 09: PHYSICAL AND CHEMICAL PROPERTIE

PHYSICAL STATE/APPEARANCE:	Thick. Liquid, Clear Hazy White		
ODOUR:	Odorless - Musty	**ODOUR THRESHOLD:**	N. Av.
VAPOUR PRESSURE (mm Hg @ 20C):	N. Av.	**VAPOUR DENSITY (Air=1):**	N. Av.
EVAPORATION RATE (Ether = 1):	N. Av.	**SPECIFIC GRAVITY:**	1.394
BOILING POINT (C):	N. Av.	**FREEZING POINT (C)**	N. Av.
Ph (% SOLUTION):	11.3	**% VOLATILE (WT):**	N. Av.
SOLUBILITY IN WATER (% W/W)	Misible in water.		

SECTION 10: STABILITY AND REACTIVITY

CHEMICALLY STABLE? Yes

IF NO, UNDER WHICH CONDITIONS? Not Available

INCOMPATIBILITY WITH OTHER SUBTANCES Yes

IF YES, WITH WHICH ONES: Flammable hydrogen gas may be produced on contact with aluminum, tin, lead, and zinc. May react with ammonium salt solutions resulting in evolution of ammonia gas. Gels and generates heat when mixed with acid.

SPECIAL REACTIVITY AND UNDER WHAT CONDITIONS Dries to form glass film which can easily cut skin.

HAZARDOUS DECOMPOSITION PRODUCTS: Hydrogen

SECTION 11: TOXICOLOGICAL INFORMATION

EXPOSURE LIMIT OF MATERIAL N. Av.

LC 50 OF MATERIAL, SPECIES AND ROUTE	N. Av.
LD 50 OF MATERIAL, SPECIES AND ROUTE	See Sec 2
CARCINOGENICITY OF MATERIAL	N. Av.
REPRODUCTIVE EFFECTS:	N. Av.
IRRITANCY OF MATERIAL	N. Av.
SENSITIZING CAPABILITY OF MATERIAL	N. Av.
SYNERGISTIC MATERIALS	N. Av.

SECTION 12: ECOLOGICAL INFORMATION

AQUATIC TOXICITY The following data is reported for sodium silicates on a 100% solids basis: A 96 hour median tolerance for fish (Gambusia affnis) of 2320 ppm; a 96 hour median tolerance for water fleas (Daphnia magna) of 247 ppm; a 96 hour median tolerance for snail eggs (Lymnea) of 632 ppm; and a 96 hour median tolerance for Amphipoda of 160 ppm. This material is not persistent in aquatic systems, but its high pH when undiluted or unneutralized is acutely harmful to aquatic life. Diluted material rapidly depolymerizes to yield dissolved silica in a form that is indistinguishable from natural dissolved silica. It does not contribute to BOD. This material does not bioaccumulate except in species that use silica as a structural material such as diatoms and siliceous sponges. Where abnormally low natural silica concentrations exist (less than 0.1 ppm), dissolved silica may be a limiting nutrient for diatoms and a few other aquatic algal species. However, the addition of excess dissolved silica over the limiting concentration will not stimulate the growth of diatom populations; their growth rate is independent of silica concentration once the limiting concentration is exceeded. Neither silica nor sodium will appreciably bioconcentrate up the food chain. Sinks and dissolves in water. Only water will evaporate from this material.

SECTION 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL: Disposal of Waste Method: Disposal of all wastes must be done in accordance with municipal, provincial and federal regulations.
Contaminated Packaging: Empty containers should be recycled or disposed of through an approved waste management facility.

SECTION 14: TRANSPORT INFORMATION

TDG CLASSIFICATION Class 0, NOT REGULATED

UN NUMBER:

PACKING GROUP:

Special Provisions for Transport

SECTION 15: REGULATORY INFORMATION

WHMIS CLASSIFICATION D2B

D2B TOXIC MATERIALS

SECTION 16: OTHER INFORMATION

ABBREVIATIONS USED: N.Av. = Not Available
N.App. / N.Ap. = Not Applicable

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SOURCES: Supplier MSDS

For updated copies of an MSDS, please contact Anchem Sales at the address/phone number on Page 1 or fax the MSDS Co-ordinator at (519) 451-4593.

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