MATERIAL SAFETY DATA SHEET

1. IDENTIFICATION

Nypower Industries Ltd.
111 Fisher Street
Okotoks, AB. T1S 1A8

Phone: 403-995-2588
In Case of Emergency: 403-998-7297

Product name: Auto-San L.T
Other Name:
Distributed by:
Product Use: Sanitizer for Auto Dishwashing Machines
Date Completed: January, 2015

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2. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient	%W/W	CAS Number
Sodium Hypochlorite	6-12	7681-52-9

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3. HAZARDS IDENTIFICATION

Eye and Skin irritant. Harmful if swallowed

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4. FIRST AID MEASURES

Inhalation: Can release corrosive chlorine gas
Remove victim to fresh air. Give artificial respiration only if breathing has stopped. If breathing is difficult, give oxygen. Do not allow victim to move about unnecessarily. Symptoms of pulmonary edema can be delayed up to 48 hours after exposure. Seek immediate medical attention.

Ingestion: Do not induce vomiting. If conscious rinse mouth with water, and drink 1 glass of water to dilute. Get medical attention.

Eye contact: Flush immediately with water for 30 minutes, lifting eyelids. Get medical attention

Skin contact: Remove clothing and footwear. Flush skin thoroughly with

In all cases: If symptoms persist seek medical attention

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5. FIRE – FIGHTING MEASURES

Flash point (test method): Not applicable
Flammable limits: Non-flammable
Lower: Not applicable
Upper: Not applicable
Fire extinguishing substances: Use extinguishing media appropriate for surrounding fire
Autoignition temperatures: Not applicable
Hazardous combustion products: Chlorine (acid contact)
Explosion data:
Sensitivity to mechanical impact: Not applicable
Sensitivity to static discharge: Not applicable

Special firefighting procedures: As for surrounding fire

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6. ACCIDENTAL RELEASE MEASURES

Personal precautions: Wear appropriate protective equipment

Environmental precautions: Prevent from entering sewers, waterways or low areas

Methods for cleaning up: Dike and contain. Collect and reuse if possible. Absorb with Inert material and place in waste containers. Small spills can be flushed or wiped. Do not allow runoff into public waterways

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7. HANDLING AND STORAGE

Handling: Close container when not in use. Avoid transfer of product. Wash thoroughly after handling

Storage: Store in below 29°C and above freezing. Keep out of reach of children. Keep out of sunlight. Do not freeze

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8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering controls: Use in ventilated area if possible

Respiratory protection: If exposure exceeds occupational limits, use appropriate NIOSH Approved respirator

Eye protection: Chemical goggles. Wear a face shield if splashing hazards exists

Other protection: Wear protective clothing as necessary to prevent skin contact

Exposure limits:

INGREDIENT	ACGIH	OSHA	Other
Sodium hypochlorite			2 mg/m³
Chlorine	0.5 ppm		

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9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	Liquid	**Solubility in water:**	Complete
Boiling point:	Slowly decomposes above 40°C	**Vapour pressure:**	12.1 mmHg at 20°C
Vapour density:	Not available	**Evaporation rate:**	Not available
Freezing point:	-6°C	**Odour threshold:**	Not available
Specific gravity:	1.17 at 20°C	**pH:**	11.8-13
Appearance & odour:	Clear, greenish-yellow/Strong chlorine odour		

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10. STABILITY AND REACTIVITY

Stability: Unstable at temperatures above 40°, in sunlight, and in contact with acid.

Conditions of instability: Heat, sunlight, acidic conditions, the presence of metals and other impurities.

Incompatibility: ( ) Water () Oxidizers (X) Acid ( ) Base ( ) Other

PRIMARY AMINES: (e.g. ethylamine) and AROMATIC AMINES (e.g. aniline) - react to form explosively unstable N-mono- or di- chloramines.
AMMONIUM SALTS: (e.g. ammonium sulfate and ammonium nitrate), AMMONIA, UREA or PHENYLACETONITRILE: - form explosive nitrogen trichloride, if acid is present.
ACIDS: (especially hydrochloric acid) - contact releases corrosive chlorine gas. METALS: (especially copper, aluminum, nickel, and cobalt) - accelerate decomposition.
REDUCING AGENTS: (e.g. hydrides, such as lithium aluminum hydride) - cause a violent reaction.
ETHYLENEIMINE (AZIRIDINE): - form the explosive N-chloroethyleneimine. METHANOL: - can form explosive methyl hypochlorite, especially in the presence of acids or other etherification catalysts.
FORMIC ACID: - becomes explosive at 55°C.
FURFURALDEHYDE: - drop wise addition of the aldehyde to a 10% excess of sodium hypochlorite solution at 20-25°C can lead to a violent explosion.
ETHANEDIOL (ETHYLENE GLYCOL): erupts violently after an induction period of about 4 to 8 minutes. SODIUM ETHYLENEDIAMINETETRACETATE (EDTA) SOLUTION and SODIUM HYDROXIDE SOLUTION: mixing the three solutions leads to vigorous foaming decomposition.

Conditions of reactivity: Hazardous polymerization will not occur. Reacts exothermically with acids. Reacts with ammonia, amines and ammonia salts to produce chloramines.

Hazardous decomposition products: Chlorine gas

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11. TOXICOLGICAL PROPERTIES

POTENTIAL ACUTE HEALTH EFFECTS

Ingestion: Burning of the mouth and throat, abdominal cramps, nausea, vomiting, diarrhea, shock. May lead to convulsions, coma, and even death.

Eye contact: Direct contact may cause irritation, redness & tearing

Skin Contact: Very dilute solutions have caused negligible irritation, concentrated solution have caused corrosive injury

Inhalation: Irritant of the nose and throat, causing coughing, difficulty breathing, and pulmonary edema.

POTENTIAL CHRONIC HEALTH EFFECTS:

Inhalation: Prolonged or repeated overexposure causes lung damage.

Ingestion: Not available

Eye contact: Not available

Skin contact: Not available

Skin absorption: Not available

Irritancy of product: See WHMIS criteria
Sensitization of product: No evidence
Carcinogenicity: No evidence
Reproductive toxicity: No known significant effects
Mutagenicity: No known significant effects
Synergistic product: Not available

HAZARDOUS INGREDIENTS	CAS NO.	TOXICITY DATA
Sodium Hypochlorite	7681-52-9	LD_{50} Oral (Rat) 8200 mg/kg LD_{50} Dermal (Rabbit) 10000 mg/kg

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12. ECOLOGICAL INFORMATION
Ecotoxicological information:

Component	Toxicity to Algae	Toxicity to Fish	Toxicity to Daphnia and Other Aquatic Invertebrates
Sodium Hypochlorite	Not Available	LC_{50}(Salmo gairdneri, 96hr): 0.172mg/L	LC_{50}(Daphnia magna, 96hr): 2.1mg/L
	Not Available	LC_{50}(Ictalurus punctatu 96hr): 0.156mg/L	LC_{50}(Gammarus fasciatus, s, 96hr): 4mg/L

Other information:

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13. DISPOSAL COSIDERATIONS
Waste disposal: Dispose of in a manner approved by local, provincial and federal regulations

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14. TRANSPORT INFORMATION
TDG classification: Not regulated

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15. REGULATORY INFORMATION
WHMIS: D2B E
This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR

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16. PREPARATION INFORMATION
Prepared by: Nypower Industries Ltd., Ph: (403) 995-2588
Disclaimer:
Notice to reader

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 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.