

MATERIAL SAFETY DATA SHEET**SECTION 1 — PRODUCT IDENTIFICATION**

Product identifier: Spa Kleen
Product use: Spa Treatment.
Product Code Number: 56557
MSDS Number: 0981

WHMIS Classification: D1A, E, C

Supplier name and address:
 Proven Brand
 a division of 1884318 Ontario Inc.
 Hamilton, Ontario
 1-855-574-5444

Manufacturer's name and address:
 Refer to supplier

Emergency Telephone #: CANUTEC (613) 996-6666

SECTION 2 — CHEMICAL COMPOSITION/HAZARDOUS INGREDIENTS

<u>Ingredients</u>	<u>CAS #</u>	<u>% (weight)</u>	<u>LD₅₀</u> <u>mg/kg</u> <u>oral/rat</u>	<u>LD₅₀</u> <u>mg/kg</u> <u>skin/rabbit</u>	<u>LC₅₀</u> <u>ppm</u> <u>inh/mouse</u>
Sodium dichloroisocyanurate Dehydrate	51580-86-0	5-10	1823 mg/kg	>5000	1.17 gm/m ³ /1Hr

SECTION 3 — HAZARDS IDENTIFICATION

POTENTIAL HEALTH EFFECTS

Routes of entry: Inhalation, ingestion, skin and eye contact.

Emergency Overview: POISON ! Danger! Corrosive! Causes severe burns and eye damage.

Signs and symptoms of short-term (acute) exposure:

Inhalation: Extremely irritating and/or corrosive to the eyes, nose, throat and lungs. Harmful if inhaled.

Skin contact: Dangerous in case of skin contact. Causes tissue damage.

Eye contact: Contact can result in corneal damage or blindness. Immediate pain, severe burns.

Ingestion: Harmful or fatal if swallowed. May burn mouth, throat and stomach.

Effects of long-term (chronic) exposure: See Section 11. **Other important hazards:** None reported.

MAJOR HEALTH HAZARDS: *CAUSES IRREVERSIBLE EYE DAMAGE. MAY BE FATAL IF INHALED. MAY CAUSE SKIN IRRITATION. MAY CAUSE RESPIRATORY TRACT IRRITATION. HARMFUL IF SWALLOWED. MAY CAUSE BURNS TO MOIST SKIN IF NOT PROMPTLY REMOVED.*

PHYSICAL HAZARDS: *STRONG OXIDIZER. MAY INTENSIFY FIRE.* Contact with water slowly liberates irritating and hazardous chlorine containing gases. Contamination with moisture, organic material, or other incompatible chemicals may start a reaction with generation of heat, liberation of hazardous gases, and possible fire and explosion. Contact with acids liberates toxic gas. Decomposes at temperatures above 464 °F with liberation of harmful gases. When ignited will burn with the evolution of chlorine and equally toxic gases. Do not get water inside container. Wet material may generate nitrogen trichloride, an explosion hazard.

AQUATIC TOXICITY: Very toxic to aquatic organisms. Very toxic to aquatic life with long lasting effects.

PRECAUTIONARY STATEMENTS: Corrosive. Causes irreversible eye damage. May be fatal if inhaled. Do not breathe dust, vapor or spray mist . Harmful if swallowed or absorbed through skin. Do not get in eyes, on skin, or on clothing. Do not eat, drink, or smoke when using this product. Wear safety glasses with side shields, chemical splash goggles, face-shield, protective clothing, and chemical resistant gloves when handling this product . Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using

tobacco, or using the toilet. Remove contaminated clothing and wash before reuse. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Collect spillage. Store in a well-ventilated place. Keep material dry and store in a cool environment.

SECTION 4 — FIRST AID MEASURES

Inhalation: Remove victim to fresh air. If symptoms persist, call a physician.

Skin contact: Flush skin with plenty of water, for at least 15 minutes, while removing contaminated clothing. Call physician immediately. Wash contaminated clothing before reuse. Obtain medical attention.

Eye contact: IMMEDIATELY flush eyes with running water for at least 15 minutes, keeping eyelids open. Consult a doctor immediately.

Ingestion: Immediately call physician. DO NOT induce vomiting. Give several glasses of water. Never give anything by mouth if victim is unconscious or convulsing.

SECTION 5 — FIRE FIGHTING MEASURES

Fire hazards/conditions of flammability: Not flammable. But substance is a strong oxidizer and its heat of reaction may cause ignition.

Flash point (Method): Not applicable. °C (°F)

Lower flammable limit (% by volume): n/ap

Upper flammable limit (% by volume): n/ap

Explosion data: *Sensitivity to mechanical impact:* Explosive with shock, heat, friction. *Sensitivity to static discharge:* Not sensitive.

Oxidizing properties: yes.

Auto-ignition temperature: None.

Suitable extinguishing media: As appropriate for burning of surrounding products.

Special fire-fighting procedures/equipment: Adding water to this product generates great deal of heat.

Hazardous combustion products: Oxides of carbon, nitrogen and hydrogen gas.

SECTION 6 — ACCIDENTAL RELEASE MEASURES

Personal precautions: Wear adequate personal protective equipment.

Environmental precautions: Prevent spill from entering water course or drains .

Spill response/Cleanup: Recover and reuse as much of the product as possible. Restrict access to area until completion of clean up. Ensure trained personnel conduct clean up. Do not touch spilled material.

Prohibited materials: None known.

SECTION 7 — HANDLING AND STORAGE

Safe handling procedures: Product is corrosive. Avoid contact with skin, eyes and clothing. Wear proper protective equipment, including rubber gloves and eye protection.

Storage requirements: Store in a cool, dry area. Keep away from incompatible materials, (see Sect. 10)

Special packaging materials: Plastic or other corrosion resistant containers.

SECTION 8 — EXPOSURE CONTROLS AND PERSONAL PROTECTION

Ventilation and engineering controls: Mechanic ventilation should be adequate.

Respiratory protection: Normally not required.

Protective gloves: Butyl rubber, Neoprene, Viton. Not recommended – Polyvinyl alcohol..

Eye protection: Safety glasses, or chemical goggles.

Other protective equipment: As required by workplace standards.

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

Physical form, colour and odour: White powder, typical chlorine odour.

Odour threshold: n/av

pH: 6-7

Boiling point: n/av

Melting/freezing point: n/av

Vapour pressure: n/av

Coefficient of oil/water distribution: Essentially zero.

Vapour density: n/av

Evaporation rate: n/ap

Solubility in water: Very soluble.

Specific gravity or relative density (water = 1): 0.95

Volatile organic compounds (VOC's): n/ap

Percent Volatile by Weight: n/av

SECTION 10 — REACTIVITY AND STABILITY DATA

Reactivity/ Stability: Stable at normal temperatures and pressures.

Conditions to Avoid: Do not get water inside container. Wet material may generate nitrogen trichloride, an explosion hazard. Avoid contact with easily oxidizable organic material.

Incompatibilities/ Materials to Avoid: Acids, ammonia, bases, floor sweeping compounds, calcium hypochlorite, reducing agents, organic solvents and compounds

Hazardous Decomposition Products: chlorine, nitrogen, nitrogen trichloride, cyanogen chloride, oxides of carbon, phosgene.

Hazardous Polymerization: Will not occur.

SECTION 11 — TOXICOLOGICAL INFORMATION

LD₅₀: Not established for this product. See Section 2 for values for ingredients.

LC₅₀: Not established for this product. See Section 2 for values for ingredients.

Exposure limits: ACGIH-TLV 2 ppm (Ceiling) for Caustic Soda.

Carcinogenicity: None of the ingredients is listed by IARC, ACGIH, NTP, and OSHA as carcinogen.

Teratogenicity, mutagenicity, other reproductive effects: There is no human or animal information available on teratogenicity, reproductive toxicity, or mutagenicity.

Sensitization to material: Not reported.

Conditions aggravated by exposure: Skin conditions.

Synergistic materials: None known.

TOXICITY: Monosodium cyanurate was administered via drinking water to rats for 104 weeks at concentrations of 0, 400, 1200, 2400 and 5375 ppm (solubility limit). No compound-related effects on body weights, clinical signs of toxicity or food or water consumption were noted during the study. An increased incidence of gross lesions in the urinary tract, calculi in the kidney and lesions in the heart were observed in males receiving the highest dose level of 5375 ppm (solubility limit). The health effects seen in this study were due to precipitation of the test substance in the urinary tract when the test substance was fed at the solubility limit. Adverse health effects were not seen at lower doses where precipitation did not occur.

CARCINOGENICITY: This product is not classified as a carcinogen by NTP, IARC or OSHA.

MUTAGENIC DATA: Not mutagenic in 5 salmonella strains and 1 E. coli strain with or without mammalian microsomal activation.

REPRODUCTIVE TOXICITY: There are no known or recorded effects on reproductive function or fetal development.

SECTION 12 — ECOLOGICAL INFORMATION

Environmental effects:

ECOTOXICITY DATA:

Fish Toxicity:

LC50 Bluegill sunfish: 0.25-1.0 mg/L (96 hour)

LC50 Rainbow trout: 0.13-0.36 mg/L (96 hour)

LC50 Inland silversides: 1.21 mg/L (96 hour)

Invertebrate Toxicity:

LC50 Water flea: 0.196 mg/L (48 hour)

LC50 Mysid shrimp: 1.65 mg/L (96 hour)

Other Toxicity:

LD50 Mallard duck (oral): 1,916 mg/kg

LD50 N. Bobwhite Quail (oral): 1,732 mg/kg

LD50 Mallard duck (diet): >10,000 ppm
 LD50 N. Bobwhite Quail (diet): >10,000 ppm

SECTION 13 — WASTE DISPOSAL

Handling for disposal: Reuse if possible.

Methods of disposal: Follow local, provincial, state and federal regulations.

SECTION 14 — TRANSPORTATION INFORMATION

Shipping description: TDG –UN3077 Environmentally Hazardous Substance, Solid, n.o.s. (Sodium dichloroisocyanurate dihydrate), Marine Pollutant Packing Group III

Please note: This shipping description is of a general nature only. It does not consider package sizes, modes of transport and other specific circumstances. Appropriate regulations should be referenced, and handling for transportation of dangerous goods/hazardous materials should be performed by trained personnel only.

SECTION 15 — REGULATORY INFORMATION

WHMIS information: D1A, E, C

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

CEPA/DSL: All ingredients of this product are listed on the DSL

SECTION 16 — OTHER INFORMATION

Prepared by: Armstrong Manufacturing Inc.

Telephone number: (905) 566-1395

Preparation date: 5 December 2017

References:

1. ACGIH, Threshold Limit Values and Biological Exposure Indices for 2003.
2. International Agency for Research on Cancer Monographs, Supplement 7, 1988.
3. Canadian Centre for Occupational Health and Safety. CHEMINFO database.
4. Material Safety Data Sheets from raw materials suppliers.
5. N. Irving Sax. Dangerous Properties of Industrial Materials, Seventh Edition.

n/ap Not applicable

n/av Not available

MV/mt