

Product Name: FROG® Leap Reveille
Revision Date: October 1, 2016
Supersedes: Rev 2, 05/20/2015
Revision: 3

1. Identification

Product Identifier: FROG® Leap Reveille
Other Means of Identification: Sodium dichloro-s-triazinetrione dihydrate; NaDCCA Dichlor; Sodium dichloroisocyanurate; Chloroisocyanurate
Recommended Use: Swimming pools, spas, hot tubs disinfectant; spa and hot tub shock
Supplier: King Technology, Inc
530 11th Ave S, Hopkins, MN 55343, USA
Phone (952) 933-6118
EPA Registration Number: 53735-13
Emergency Telephone: Chemtrec (800) 424-9300

2. Hazards identification

GHS Classification: Eye Damage: Category 1
Oxidizing Solids: Category 2
Specific Target Organ Toxicity (Single Exposure): Category 3
Acute Toxicity (Inhalation): Category 4
Acute Toxicity (Oral): Category 4
Acute Toxicity (Dermal): Category 4

GHS Label Elements:

– **Signal Word:** DANGER

– **Pictograms:**



– **Hazard Statements:** Causes serious eye damage
May intensify fire; oxidizer
May cause respiratory irritation
Harmful if inhaled
Harmful if swallowed
Harmful in contact with skin

– **Precautionary Statements:** Keep away from heat.
Keep away from clothing or other combustible materials.
Take any precaution to avoid mixing with combustibles.
In case of fire: Use large amounts of water to extinguish.
Avoid breathing dust/fume/gas/mist/vapors/spray.
Use only outdoors or in a well-ventilated area.
Wear protective gloves, protective clothing, and eye and face protection.
Wash exposed areas thoroughly after handling.
Do not eat, drink or smoke when using this product.

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In in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Immediately call a poison center or doctor.
If inhaled: Remove person to fresh air and keep comfortable for breathing.
Call a poison center or doctor if you feel unwell.
If swallowed: Call a poison center or doctor if you feel unwell.
Rinse mouth.
If on skin: Wash with plenty of water.
Call a poison center or doctor if you feel unwell.
Specific treatment (see First-aid Measures on this safety data sheet).
Take off contaminated clothing and was it before reuse.
Store locked up in a well-ventilated place. Keep container tightly closed.
Dispose of contents and container in accordance with local/regional/national/international regulations.

Unclassified Hazards: None

Percentage of Ingredients with Unknown Toxicity: Zero

3. Composition / Information on Ingredients

Components	Weight %
Sodium dichloro-s-triazinetrione dihydrate CAS No. 2893-78-9	99.0
Inerts	1.0

The specific chemical identities have been withheld as trade secrets.

4. First-aid Measures

Eye contact: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes then continue rinsing the eye. Immediately call a poison control center or doctor for treatment advice.

Skin contact: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. If irritation persists, call a doctor for treatment advice.

Inhalation: Move person to fresh air. If person is not breathing call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if breathing is difficult, give oxygen. Call a poison control center or doctor for further treatment advice.

Ingestion: Call poison control center or doctor immediately for treatment advice. Drink plenty of water in small gulps. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.

Most Important Symptoms, Acute and Delayed: Causes serious eye damage. May cause respiratory irritation. Harmful if inhaled, swallowed, or in contact with skin.

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Immediate Medical Attention Required: If in eyes, immediately call a poison center or doctor. Otherwise, get medical attention if you feel unwell.

5. Fire-fighting Measures

Suitable Extinguishing Media: Extinguish with large amounts of water.

Unsuitable Extinguishing Media: For safety reasons DO NOT use dry chemical extinguisher containing, dry chemicals, carbon dioxide, halogenated agents.

Specific Hazards Arising From the Chemical: In case of fires, hazardous combustion gases are formed; nitrogen; hydrogen chloride (HCl); Carbon monoxide and carbon dioxide; Fumes of metal oxides; nitrogen trichloride (explosion hazard!); Isocyanic acid; Chlorine (Cl₂)

Special Protective Equipment and Precautions for Fire-fighters: As in any fire, wear self-contained breathing apparatus with pressure – demand, MSHA/NIOSH (approved or equivalent) and full protection clothing.

Other information Containers close to fire should be transferred to a safe place. Heat causes increase in pressure and risk of bursting. Cool endangered containers with water spray jet. Run-off water from firefighting must not be discharged into drains or enter surface water.

6. Accidental Release Measures

Personal Precautions: For small spills in well ventilated areas wear respiratory protection and wear clothing, chemical resistant gloves, chemical resistant footwear, and chemical resistant headgear for overhead exposure.

For cleanup of large spills, or small dry spills in confined areas, wear full-face respirator with chlorine cartridges or a positive pressure supplied air respirator. Additionally, body protection should be impervious clothing covering the entire body to prevent personal contact with the material.

Environmental precautions: This pesticide is toxic to fish and aquatic organisms. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of EPA.

Methods for Cleaning Up: Collect mechanically (preferably in dry condition). Send in suitable containers for recovery or disposal.

7. Handling and Storage

Handling: Use with adequate ventilation of working area (local exhaust ventilation if necessary). Product inherent handling risks must be minimized taking the

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appropriate measures of protection and preventive actions. The working process should be designed to rule out the release of hazardous substances or skin contact as far it is possible by the state of the art. Avoid the formation and deposition of dust.

Protection against fire and explosion:

Keep away from sources of ignition. Use explosion-proof equipment/fittings and non-sparking tools. Take precautionary measures against static charges. The product is explosive.

Storage:

Prevent formation of dust. Keep container tightly closed when not in use. Protect from atmospheric moisture and water. Store in a cool, dry, well-ventilated area from heat sources.

Containers which are opened must be carefully resealed and kept upright to prevent leakage. Always keep in containers of same material as the original one.

Do not store together with: organic materials; combustible materials; Ammonia; Ammonium compounds; Alkalies; Oxidizing agents; Reducing agents; Acids

8. Exposure Controls and Personal Protection

Exposure Limits – DUST

LIMITS FOR AIR CONTAMINANTS (OSHA)

Particulates not otherwise regulated – total dust – TWA 15 mg/m³

LIMITS FOR AIR CONTAMINANTS (OSHA)

Particulates not otherwise regulated – Respirable fraction – TWA 5 mg/m³

LIMITS FOR AIR CONTAMINANTS (ACGIH)

Particulates (insoluble or poorly soluble) respirable particles – TWA 3 mg/m³

LIMITS FOR AIR CONTAMINANTS (ACGIH)

Particulates (insoluble or poorly soluble inhalable particles) – TWA 10 mg/m³

Appropriate Engineering Controls:

Set up ventilation to effectively remove and prevent buildup of any dust generated from the handling of this product.

Personal protective equipment:
– Respiratory protection:

If ventilation is not sufficient to effectively prevent buildup of dust, and workplace exposure limits are exceeded, a respirations protection approved for this particular job must be worn. In case of dust formation, take appropriate measures for breathing protection in the event workplace threshold values are not specified. A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.

– Hand protection:

Glove permeation data does not exist for this material. The following glove(s) should be used for splash protection only.
Appropriate Material – butyl rubber.

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– **Eye protection:** Use chemical splash goggles and face shield (ANSI Z87.1 or approved equivalent).

– **Skin and body protection:** Prevent contact with skin & clothing by using protective garments.

General protective and hygiene measures: Keep away from foodstuffs and beverages. Do not eat, drink or smoke during work time. Wash hands before breaks and after work. Avoid contact with eyes and skin. Do not inhale dust. Remove soiled or soaked clothing immediately. Provide eye wash fountain in work area.

9. Physical and Chemical Properties

Appearance: White solid
Odor: Chlorine
Odor threshold: Not available
Melting point / range: 464 - 482 ° F (decomposition)
Boiling point / range: Not available
Flash point: Not available
Evaporation rate: Not available
Flammability: Not available
Vapor pressure: Not available
Vapor density: Not available
Solubility in water: 0.055 lb / 0.22lb (reference temperature: 77 ° F)
Specific gravity: 16.69 lbs/gallon (reference temperature: 68 ° F)
pH: approximately 6.6 (reference temperature: 68 ° F, in a 1% aqueous solution)
Flammability limits: Not available
Partition coefficient: Not available
Auto-ignition temperature: Not available
Decomposition temperature: 464 - 482 ° F
Viscosity: Not available

10. Stability and Reactivity

Reactivity: Reactions are possible with incompatible materials.

Stability: This product is stable under normal conditions.

Possibility of hazardous reactions: Exothermic reactions are possible in the event of contact with incompatible substances

Conditions to avoid: Heat, open flames and other sources of ignition. Protect against humidity. Exothermic reactions are possible in the event of contact with incompatible substances. Contact with acids liberates toxic gases.

Incompatible materials: Organic materials; combustible materials; ammonia; ammonium compounds; Alkali. Oxidizing agents; reducing agents; acids.

Hazardous decomposition products: Nitrogen; Hydrogen chloride (HCl); Chlorine. Isocyanic acid; Fumes of metal oxide. nitrogen trichloride.

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11. Toxicological Information

Acute toxicity:

Acute oral toxicity LD50 – 735 mg/kg
Species: rate
Source: IUCLID

Acute dermal toxicity:

Acute dermal toxicity LD50 > 5000 mg/kg
Species: rate
Source: IUCLID

Experience in practice: Harmful if swallowed. Contact of the product with skin or eyes may cause irritation.

12. Ecological Information

Ecotoxicity

Fish toxicity LD50 0.28 mg/l
Species: Lepomis macrochirus
Duration of exposure: 96 H
Source: IUCLID

Daphnia toxicity LD50 0.18 – 0.21 mg/l
Species: Daphnia magna
Duration of exposure: 48 H
Source: IUCLID

Other adverse effects Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment (manufacturer).

Other information Product is not allowed to discharge into aquatic environment, drains or sewage treatment plants.

13. Disposal Considerations

Product Dispose in accordance with federal, state and local regulations. Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture or rinsate is a violation of federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA regional Office for guidance.

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14. Transportation Information

US DOT: Class: 5.1 – Oxidizing substances
Packing Group: II
Label: OXIDIZER (5.1)
UN/NA number: UN2465
Proper shipping name: Dichloroisocyanurate acid salts

Transport IMDG: Class: 5.1 – Oxidizing substances
Packing Group: II
UN/NA number: UN2465
Proper shipping name: Dichloroisocyanurate acid salts
EmS: F-A+S-Q
Label: OXIDIZING AGENT (5.1)
Marine pollutant mark: Symbol “fish and tree”

Transport ICAO/IATA: Class: 5.1
Packing Group: II
UN number: UN2465
Proper shipping name: Dichloroisocyanurate acid salts
Label: OXIDIZER (5.1)

15. Regulatory Information

US Federal Regulations:

EPA FIFRA Information: This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:

DANGER
Corrosive. Causes irreversible eye damage. May be fatal if inhaled. Harmful if swallowed or absorbed through skin. Do not get in eyes, on skin or clothing. Wear goggles, face shield, or safety glasses. Avoid breathing dust and fumes. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse.

–Toxic Substances Control Act (TSCA): All components are listed on the TSCA inventory.

–Clean Water Act (CWA): None of the ingredients is listed.

–OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200)
CAS no. 2893-78-9

–SARA Section 302 (RQ): None of the ingredients is listed.

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–SARA 311/312 Hazard category – Acute Health Hazards

–SARA Section 313: None of the ingredients is listed.

–HAPS Hazardous Air Pollutants: None of the ingredients is listed.

–Volatile organic compounds (VOC) Value: 0 pound/g, allon

–HMIS Classification Health: 3
Flammability: 1
Reactivity: 1
PPE: F

–NFPA Rating Health: 3
Fire Hazard: 1
Reactivity: 1

Carcinogenicity:
–IARAC None of the ingredients is listed in group 1, 2A or 2B.

US State Regulations:

–New Jersey Worker and Community Right to Know Act. The following ingredients are listed:
CAS no. 2893-78-9

–California Proposition 65 None of the ingredients is listed.

–Pennsylvania HAZARDOUS SUBSTANCE LIST Following ingredients are listed:
CAS no. 2893-78-9

Canada Federal Regulations DSL/NDSL
Listed on DSL inventory.

– WHMIS Classification 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. Classification C, D2B

16. Other Information

Date of preparation: October 1, 2016

Details of change from previous version:

- Updated Corporate Logo

The information in this Safety Data Sheet should be provided to all who use, handle, store, transport, or otherwise be exposed to this product. This information has been prepared for the guidance of plant engineering, operations and management, and for persons working with or handling this product. Additionally, if this Safety Data Sheet is more than three years old you should contact King Technology to make certain that this sheet is current.

Although the information and recommendations set forth herein (hereinafter “information”) are presented in good

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faith and believed to be correct as of the date hereof, King Technology makes no representations as to the completeness or accuracy thereof. Information is supplied upon the condition that the persons receiving same will make their own determination as to its safety and suitability for their purposes prior to use.

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End of safety data sheet