# SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of:
US OSHA HCS 2024

**Issuing Date** 31-Jan-2025 **Revision date** 03-Jan-2025 **Revision Number** 1

## 1. Identification

**Product identifier**

**Product Name** FROG StoMPS™

**Other means of identification**

**UN number or ID number** UN3260

**Synonyms** Non-Chlorine Shock

**Recommended use of the chemical and restrictions on use**

**Recommended use** Residential Hot Tubs/Swim Spas

**Restrictions on use** Consumer use

**Details of the supplier of the safety data sheet**

**Manufacturer Address**
King Technology, Inc.
6000 Clearwater Dr.
Minnetonka, MN 55343
+1 (952) 933-6118

**E-mail** sdsinfo@kingtechnology.com

**Emergency telephone number**

**Emergency telephone** CHEMTREC Emergency Tel. #: 1-800-424-9300

## 2. Hazard(s) identification

**Classification of the substance or mixture**

| | |
|---|---|
| Acute toxicity - Oral | Category 4 |
| Acute toxicity - Dermal | Category 4 |
| Skin corrosion/irritation | Category 1 Sub-category B |
| Serious eye damage/eye irritation | Category 1 |

**Hazards not otherwise classified (HNOC)**
Not applicable.

**Label elements**

**Danger**

**Hazard statements**
Harmful if swallowed.
Harmful in contact with skin.
Causes severe skin burns and eye damage.
**Precautionary Statements - Prevention**
Wash face, hands and any exposed skin thoroughly after handling.
Do not eat, drink or smoke when using this product.
Wear protective gloves/clothing and eye/face protection.
Do not breathe dust/fume/gas/mist/vapors/spray.
**Precautionary Statements - Response**
IF exposed or concerned:.
Immediately call a POISON CENTER or doctor.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
IF ON SKIN: Wash with plenty of water and soap.
Call a POISON CENTER or doctor if you feel unwell.
Take off contaminated clothing and wash it before reuse.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
Immediately call a POISON CENTER or doctor.
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell.
**Precautionary Statements - Storage**
Store locked up.

**Precautionary Statements - Disposal**
Dispose of contents/container to an approved waste disposal plant.

**Hazards classified under paragraph (d)(1)(ii) of 1910.1200**
No information available.

**Other information**
Harmful to aquatic life.

## 3. Composition/information on ingredients

**Substance**

| Chemical name | CAS No. | Weight-% | Trade secret |
|---|---|---|---|
| Potassium peroxymonosulfate sulfate (K5H3(SO3(O2))2(SO4)2) | 70693-62-8 | 90-100 | * |

*The exact percentage (concentration) of composition has been withheld as a trade secret.

## 4. First-aid measures

**Description of first aid measures**

**General advice** Immediate medical attention is required. Show this safety data sheet to the doctor in

attendance.

**Inhalation** Remove to fresh air. If breathing has stopped, give artificial respiration. Get medical attention immediately. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. If breathing is difficult, (trained personnel should) give oxygen. Delayed pulmonary edema may occur.

**Eye contact** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Do not rub affected area. Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical attention.

**Skin contact** Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Get immediate medical attention.

**Ingestion** Do NOT induce vomiting. Rinse mouth. Never give anything by mouth to an unconscious person. Get immediate medical attention.

**Self-protection of the first aider** Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Wear personal protective clothing (see section 8). Avoid contact with skin, eyes or clothing. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation.

**Most important symptoms and effects, both acute and delayed**

**Symptoms** Redness. Burning sensation. May cause blindness. Coughing and/ or wheezing.

**Effects of Exposure** No information available.

**Indication of any immediate medical attention and special treatment needed**

**Note to physicians** Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated. Do not give chemical antidotes. Asphyxia from glottal edema may occur. Marked decrease in blood pressure may occur with moist rales, frothy sputum, and high pulse pressure.

## 5. Fire-fighting measures

**Suitable Extinguishing Media** Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable extinguishing media** No information available.

**Specific hazards arising from the chemical** The product causes burns of eyes, skin and mucous membranes. Thermal decomposition can lead to release of irritating gases and vapors.

**Explosion data**
**Sensitivity to mechanical impact** None.
**Sensitivity to static discharge** None.

**Special protective equipment and precautions for fire-fighters** Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

## 6. Accidental release measures

**Personal precautions, protective equipment and emergency procedures**

**Personal precautions** Attention! Corrosive material. Use personal protective equipment as required. Keep away

from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Avoid contact with skin, eyes or clothing. Keep people away from and upwind of spill/leak. Ensure adequate ventilation. Evacuate personnel to safe areas.

**Other information** Refer to protective measures listed in Sections 7 and 8.

**Methods and material for containment and cleaning up**

**Methods for containment** Prevent further leakage or spillage if safe to do so. Keep out of drains, sewers, ditches and waterways.

**Methods for cleaning up** Stop spill from entering drains, sewers, streams, or waterways. Use appropriate personal protective equipment (PPE). Carefully shovel or sweep up spilled material and place in suitable container. Avoid generating dust. Pick up and transfer to properly labeled containers. Keep in suitable, closed containers for disposal. After cleaning, flush away traces with water.

**Prevention of secondary hazards** Clean contaminated objects and areas thoroughly observing environmental regulations.

## 7. Handling and storage

**Precautions for safe handling**

**Advice on safe handling** Handle in accordance with good industrial hygiene and safety practice. Avoid generation of dust. Ensure adequate ventilation. Avoid breathing dust/fume/gas/mist/vapors/spray. In case of insufficient ventilation, wear suitable respiratory equipment. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Wear suitable protective clothing, gloves, footwear, and/or eye protection. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse. Wash thoroughly after handling.

**General hygiene considerations** Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Contaminated work clothing must not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product.

**Conditions for safe storage, including any incompatibilities**

**Storage Conditions** Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from combustible material. Store away from flammable substances. Do not store near combustible materials. Prevent product contamination.

## 8. Exposure controls/personal protection

**Control parameters**

**Exposure Limits** This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

**Appropriate engineering controls**

**Engineering controls** Showers
Eyewash stations
Ventilation systems.

**Individual protection measures, such as personal protective equipment**

| | |
|---|---|
| **Eye/face protection** | Tight sealing safety goggles. Face protection shield. |
| **Hand protection** | Wear suitable gloves. Impervious gloves. |
| **Skin and body protection** | Wear suitable protective clothing. Long sleeved clothing. Chemical resistant apron. |
| **Respiratory protection** | No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required. |

## 9. Physical and chemical properties

**Information on basic physical and chemical properties**

| | |
|---|---|
| **Appearance** | Granular |
| **Physical state** | Solid |
| **Color** | White |
| **Odor (includes odor threshold)** | Odorless |

| Property | Values | Remarks • Method |
|---|---|---|
| **Melting point / freezing point** | | No data available |
| **Boiling point (or initial boiling point or boiling range)** | | No data available |
| **Flammability** | | No data available |
| **Flammability Limit in Air** | | |
| **Upper flammability or explosive limits** | | No data available |
| **Lower flammability or explosive limits** | | No data available |
| **Flash point** | | No data available |
| **Autoignition temperature** | | No data available |
| **Decomposition temperature** | > 50 °C | |
| **SADT (°C)** | | No data available |
| **pH** | 2.0 | @ 30g/l at 20°C |
| **pH (as aqueous solution)** | | No data available |
| **Kinematic viscosity** | | No data available |
| **Dynamic viscosity** | | No data available |
| **Solubility** | | No data available |
| **Water solubility** | 297-357 g/l | |
| **Partition coefficient n-octanol/water (log value)** | | No data available |
| **Vapor pressure (includes evaporation rate)** | < 0.0001 hPa | |
| **Evaporation rate** | | No data available |
| **Density and/or relative density** | 2.35 g/cm3 | |
| **Bulk density** | | No data available |
| **Liquid Density** | | No data available |
| **Relative vapor density** | | No data available |
| **Particle characteristics** | | |
| **Particle Size** | | No data available |
| **Particle Size Distribution** | | No data available |

**Other information**

| | |
|---|---|
| **Molecular weight** | No information available |
| **VOC content** | No information available |
| **Softening point** | No information available |

**Information with regard to physical hazard classes**

**Explosives**

| | |
|---|---|
| Explosive properties | No information available |

**Oxidizing properties** No information available

## 10. Stability and reactivity

**Reactivity** None under normal use conditions.

**Chemical stability** Stable under normal conditions.

**Possibility of hazardous reactions** None under normal processing.

**Conditions to avoid** Excessive heat.

**Incompatible materials** Halides, Halogens, Cyanides, Heavy metal salts.

**Hazardous decomposition products** Oxygen, Sulfur dioxide, Sulfur trioxide.

## 11. Toxicological information

**Information on likely routes of exposure**

**Product Information**

**Inhalation** Specific test data for the substance or mixture is not available. Corrosive by inhalation. (based on components). Inhalation of corrosive fumes/gases may cause coughing, choking, headache, dizziness, and weakness for several hours. Pulmonary edema may occur with tightness in the chest, shortness of breath, bluish skin, decreased blood pressure, and increased heart rate. Inhaled corrosive substances can lead to a toxic edema of the lungs. Pulmonary edema can be fatal.

**Eye contact** Specific test data for the substance or mixture is not available. Causes serious eye damage. (based on components). Corrosive to the eyes and may cause severe damage including blindness. May cause irreversible damage to eyes.

**Skin contact** Specific test data for the substance or mixture is not available. Corrosive. (based on components). Causes burns. May be absorbed through the skin in harmful amounts. Harmful in contact with skin.

**Ingestion** Specific test data for the substance or mixture is not available. Causes burns. (based on components). Ingestion causes burns of the upper digestive and respiratory tracts. May cause severe burning pain in the mouth and stomach with vomiting and diarrhea of dark blood. Blood pressure may decrease. Brownish or yellowish stains may be seen around the mouth. Swelling of the throat may cause shortness of breath and choking. May cause lung damage if swallowed. May be fatal if swallowed and enters airways.

**Symptoms related to the physical, chemical and toxicological characteristics**

**Symptoms** Redness. Burning. May cause blindness. Coughing and/ or wheezing.

**Acute toxicity** Harmful if swallowed. Harmful by skin contact.

**Numerical measures of toxicity**

**Oral LD50** 1,198 mg/kg

**Component Information**

| Chemical name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|---|---|---|---|
| Potassium peroxymonosulfate | = 500 mg/kg ( Rat ) | > 2000 mg/kg ( Rat ) | > 5 mg/L ( Rat ) 4 h |

| | | | |
|---|---|---|---|
| sulfate (K5H3(SO3(O2))2(SO4)2) 70693-62-8 | | | |

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Skin corrosion/irritation** Classification based on data available for ingredients. Causes severe skin burns and eye damage.

**Serious eye damage/eye irritation** Classification based on data available for ingredients. Causes serious eye damage. Causes burns.

**Respiratory or skin sensitization** No information available.

**Germ cell mutagenicity** No information available.

**Carcinogenicity** No information available.

**Reproductive toxicity** No information available.

**STOT - single exposure** No information available.

**STOT - repeated exposure** No information available.

**Aspiration hazard** No information available.

**Other adverse effects** No information available.

**Interactive effects** No information available.

## 12. Ecological information

**Ecotoxicity** Harmful to aquatic life.

| Chemical name | Algae/aquatic plants | Fish | Toxicity to microorganisms | Crustacea |
|---|---|---|---|---|
| Potassium peroxymonosulfate sulfate (K5H3(SO3(O2))2(SO4)2) 70693-62-8 | - | LC50: >32mg/L (96h, Brachydanio rerio) | - | - |

**Persistence and degradability** No information available.

**Bioaccumulation** No information available.

**Component Information**

| Chemical name | Partition coefficient |
|---|---|
| Potassium peroxymonosulfate sulfate (K5H3(SO3(O2))2(SO4)2) 70693-62-8 | 0.3 |

**Mobility** No information available.

**Other adverse effects** No information available.

## 13. Disposal considerations

**Disposal methods**

| | |
|---|---|
| **Waste from residues/unused products** | Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation. |
| **Contaminated packaging** | Do not reuse empty containers. |

## 14. Transport information

**DOT**

| | |
|---|---|
| **UN number or ID number** | UN3260 |
| **Proper shipping name** | CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S. |
| **Transport hazard class(es)** | 8 |
| **Packing group** | II |
| **Special Provisions** | IB8, IP2, IP4, T3, TP33 |
| **DOT Marine Pollutant** | NP |
| **Description** | UN3260, CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S. (Potassium peroxymonosulfate sulfate (K5H3(SO3(O2))2(SO4)2)), 8, II |

**IATA**

| | |
|---|---|
| **UN number or ID number** | UN3260 |
| **UN proper shipping name** | Corrosive solid, acidic, inorganic, n.o.s. |
| **Transport hazard class(es)** | 8 |
| **Packing group** | II |
| **Description** | UN3260, Corrosive solid, acidic, inorganic, n.o.s.(Potassium peroxymonosulfate sulfate (K5H3(SO3(O2))2(SO4)2)), 8, II |
| **Special Provisions** | A3, A803 |
| **ERG Code** | 8L |

**IMDG**

| | |
|---|---|
| **UN number or ID number** | UN3260 |
| **UN proper shipping name** | Corrosive solid, acidic, inorganic, n.o.s. |
| **Transport hazard class(es)** | 8 |
| **Packing group** | II |
| **Marine pollutant** | NP |
| **Description** | UN3260, Corrosive solid, acidic, inorganic, n.o.s.(Potassium peroxymonosulfate sulfate (K5H3(SO3(O2))2(SO4)2)), 8, II |
| **Special Provisions** | 274 F-A S-B |

## 15. Regulatory information

**International Inventories**

Contact supplier for inventory compliance status

**US Federal Regulations**

**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

**SARA 311/312 Hazard Categories**

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

**CWA (Clean Water Act)**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

**CAA (Clean Air Act)**
This product does not contain any substances regulated as pollutants pursuant to Clean Air Act (CAA).

**CERCLA**
This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

**US State Regulations**

**California Proposition 65**
This product does not contain any Proposition 65 chemicals.

**U.S. State Right-to-Know Regulations**
This product does not contain any substances regulated under applicable state right-to-know regulations.

**U.S. EPA Label Information**

**EPA Pesticide Registration Number** Not applicable

**International Regulations**

**The Montreal Protocol on Substances that Deplete the Ozone Layer** Not applicable

**The Stockholm Convention on Persistent Organic Pollutants** Not applicable

**The Rotterdam Convention** Not applicable

## 16. Other information

| | | | | |
|---|---|---|---|---|
| **NFPA** | **Health hazards** 3 | **Flammability** 0 | **Instability** 0 | **Special hazards** - |
| **HMIS** | **Health hazards** 3 | **Flammability** 0 | **Physical hazards** 0 | **Personal protection** D |

**Key or legend to abbreviations and acronyms used in the safety data sheet**

**Legend**

| | |
|---|---|
| ACGIH | American Conference of Governmental Industrial Hygienists |
| ADN | Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (Europe) |
| ADR | Agreement concerning the International Carriage of Dangerous Goods by Road (Europe) |
| AIIC | Australian Inventory of Industrial Chemicals |
| ATE | Acute Toxicity Estimate |
| ASTM | American Society for the Testing of Materials |
| bar | Biological Reference Values for Chemical Compounds in the Work Area |
| BAT | Biological tolerance values for occupational exposure |
| BEL | Biological exposure limits |
| bw | Body weight |
| Ceiling | Maximum limit value |
| CMR | Carcinogen, Mutagen or Reproductive Toxicant |
| DOT | Department of Transportation (United States) |

| | |
|---|---|
| DSL | Domestic Substances List (Canada) |
| EmS | Emergency Schedule |
| ENCS | Existing and New Chemical Substances (Japan) |
| EPA | Environmental Protection Agency |
| GHS | Globally Harmonized System |
| HMIS | Hazardous Materials Identification System |
| IARC | International Agency for Research on Cancer |
| IATA | International Air Transport Association |
| IBC | International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk |
| ICAO | International Civil Aviation Organization |
| IECSC | Inventory of Existing Chemical Substances in China |
| IMDG | International Maritime Dangerous Goods |
| IMO | International Maritime Organization |
| ISO | International Organization for Standardization |
| KECI | Korean Existing Chemicals Inventory |
| LC50 | Lethal Concentration to 50% of a test population |
| LD50 | Lethal Dose to 50% of a test population (Median Lethal Dose) |
| MARPOL | International Convention for the Prevention of Pollution from Ships |
| NFPA | National Fire Protection Association |
| NIOSH | National Institute for Occupational Safety and Health |
| n.o.s. | Not Otherwise Specified |
| NOAEC | No Observed Adverse Effect Concentration |
| NOAEL | No Observed Adverse Effect Level |
| NOELR | No Observable Effect Loading Rate |
| NTP | National Toxicology Program (United States) |
| NZIoC | New Zealand Inventory of Chemicals |
| OECD | Organization for Economic Cooperation and Development |
| OEL | Occupational exposure limits |
| OSHA | Occupational Safety and Health Administration of the US Department of Labor |
| PBT | Persistent, Bioaccumulative and Toxic substance |
| PICCS | Philippines Inventory of Chemicals and Chemical Substances |
| PMT | Persistent, Mobile and Toxic |
| PPE | Personal protective equipment |
| QSAR | Quantitative Structure Activity Relationship |
| RID | Agreement concerning the International Carriage of Dangerous Goods by Rail (Europe) |
| SADT | Self-Accelerating Decomposition Temperature |
| SAR | Structure-activity relationship |
| SARA | Superfund Amendments and Reauthorization Act |
| SDS | Safety Data Sheet |
| SL | Surface Limit |
| STEL | Short Term Exposure Limit |
| STOT RE | Specific target organ toxicity - Repeated exposure |
| STOT SE | Specific target organ toxicity - Single exposure |
| TCSI | Taiwan Chemical Substance Inventory |
| TDG | Transport of Dangerous Goods (Canada) |
| TSCA | Toxic Substances Control Act (United States) |
| TWA | Time-Weighted Average |
| UN | United Nations |
| VOC | Volatile organic compounds |
| vPvB | Very Persistent and Very Bioaccumulative |
| vPvM | Very Persistent and Very Mobile |
| Sen+ | Sensitizer |
| Sk* | Skin designation |
| ** | Hazard Designation |

**Key literature references and sources for data used to compile the SDS**
Agency for Toxic Substances and Disease Registry (ATSDR)
U.S. Environmental Protection Agency ChemView Database
European Food Safety Authority (EFSA)
Environmental Protection Agency
Acute Exposure Guideline Level(s) (AEGL(s))
U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act
U.S. Environmental Protection Agency High Production Volume Chemicals
Food Research Journal
Hazardous Substance Database
International Uniform Chemical Information Database (IUCLID)
Japan GHS Classification
Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
NIOSH (National Institute for Occupational Safety and Health)
National Library of Medicine's ChemID Plus (NLM CIP)
National Library of Medicine’s PubMed database (NLM PUBMED)
U.S. National Toxicology Program (NTP)
New Zealand's Chemical Classification and Information Database (CCID)
Organization for Economic Co-operation and Development Environment, Health, and Safety Publications
Organization for Economic Co-operation and Development High Production Volume Chemicals Program
Organization for Economic Co-operation and Development Screening Information Data Set
World Health Organization

| | |
|---|---|
| **Issuing Date** | 31-Jan-2025 |
| **Revision date** | 03-Jan-2025 |
| **Revision Note** | Initial Release. |

**Disclaimer**
**The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.**

**End of Safety Data Sheet**