

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 31-Jan-2025 Revision Number 1

1. Identification

Product identifier

Product Name FROG SooTHe™

Other means of identification

Synonyms Calcium Hardness Increaser

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) 933-61

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
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 1
Specific target organ toxicity (single exposure)	Category 3
Specific target organ toxicity (repeated exposure)	Category 2

Hazards not otherwise classified (HNOC)

Not applicable.

Label elements

Danger



Hazard statements

Harmful if swallowed.

Causes skin irritation.

Causes serious eye damage.

May cause respiratory irritation. May cause drowsiness or dizziness.

May cause damage to organs through prolonged or repeated exposure.

Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling.

Do not eat, drink or smoke when using this product.

Use only outdoors or in a well-ventilated area.

Do not breathe dust/fume/gas/mist/vapors/spray.

Wear protective gloves/clothing and eye/face protection.

Precautionary Statements - Response

Get medical advice/attention if you feel unwell.

IF 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 ON SKIN: Wash with plenty of water and soap.

If skin irritation occurs: Get medical advice/attention.

Take off contaminated clothing and wash it before reuse.

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.

Precautionary Statements - Storage

Store in a well-ventilated place. Keep container tightly closed.

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

May be harmful in contact with skin.

3. Composition/information on ingredients

Substance

Not applicable.

<u>Mixture</u>

Chemical name	CAS No.	Weight-%	Trade secret
Calcium chloride	10043-52-4	80-90	*

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

4. First-aid measures

Description of first aid measures

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

required.

Inhalation Remove to fresh air. Get medical attention immediately if symptoms occur. IF exposed or

concerned: Get medical advice/attention.

Get immediate medical attention. Rinse immediately with plenty of water, also under the Eye contact

eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue

rinsing. Keep eye wide open while rinsing. Do not rub affected area.

Wash off immediately with soap and plenty of water for at least 15 minutes. Get medical Skin contact

attention if irritation develops and persists.

Do NOT induce vomiting. Rinse mouth. Never give anything by mouth to an unconscious Ingestion

person. Call a physician.

Self-protection of the first aider Avoid contact with skin, eyes or clothing. Wear personal protective clothing (see section 8).

Most important symptoms and effects, both acute and delayed

Burning sensation. Inhalation of high vapor concentrations may cause symptoms like **Symptoms**

headache, dizziness, tiredness, nausea and vomiting.

Effects of Exposure May cause damage to organs through prolonged or repeated exposure.

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

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

When calcium chloride is being dissolved in water, large amounts of heat develop.

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 Minimize dust generation and accumulation. Avoid breathing dust. Avoid contact with skin,

eyes or clothing. Use personal protective equipment as required. Ensure adequate

ventilation. Evacuate personnel to safe areas. Prevent exposure to dust with NIOSH

approved respirators with HEPA filters.

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

Methods and material for containment and cleaning up

Methods for containmentTake up mechanically, placing in appropriate containers for disposal. Prevent entry into

sewers, drains, ditches, underground or confined spaces and waterways. Keep

unnecessary and unprotected personnel away from spillage.

Methods for cleaning up Dispose of in accordance with federal, state and local regulations. Vacuum material or use

similar clean up measure that minimizes dust. Reuse or recycle wherever possible. Use

approved container.

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

Ventilate the area. Avoid creating dust. Sweep up to prevent slipping hazard.

7. Handling and storage

Precautions for safe handling

Advice on safe handling Do not get in eyes, on skin, or on clothing. Keep container closed when not in use. Handle

in accordance with good industrial hygiene and safety practice. 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. Ensure adequate ventilation. Avoid breathing vapors or mists. In case of insufficient ventilation, wear suitable respiratory equipment. Heat developed during diluting or dissolving is very high. Use cool water when diluting or

dissolving (temperature less than 80 °F / 27 °C).

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.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach

of children. Store locked up.

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 Provide local exhaust or process enclosure ventilation system.

Individual protection measures, such as personal protective equipment

Eye/face protection Tight sealing safety goggles.

Hand protection Chemical resistant gloves. Wear suitable gloves. Impervious gloves.

Skin and body protection Wear chemical protective suit and boots to prevent skin exposure. Wear suitable protective

clothing. Long sleeved clothing.

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.

No data available

9. Physical and chemical properties

Information on basic physical and chemical properties

Appearance White flakes
Physical state Solid
Color White
Odor (includes odor threshold) Odorless

<u>Property</u> <u>Values</u> <u>Remarks • Method</u>

Boiling point (or initial boiling point or No data available

boiling range)

Flammability No data available

Flammability Limit in Air
Upper flammability or explosive limits

Lower flammability or explosive limits

Flash point

Autoignition temperature

Decomposition temperature

No data available
No data available
No data available

SADT (°C)

No data available

No data available

pH (as aqueous solution)

No data available

Kinematic viscosityNo data availableDynamic viscosityNo data availableSolubilityNo data availableWater solubilityReadily Soluble

Partition coefficient n-octanol/water (log No data available

value)

Vapor pressure (includes evaporation rate)Negligible at ambient temperaturesEvaporation rateNo data available

Density and/or relative densityNo data availableBulk densityNo data availableLiquid DensityNo data availablePolative venes densityNo data available

Relative vapor density

No data available
Particle characteristics

Particle Size No data available
Particle Size Distribution No data available

Other information

Molecular weightNo information availableVOC contentNo information availableSoftening pointNo 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 Heat generated with water at normal temperature and pressure.

Possibility of hazardous reactions Contact with metals (aluminum, zinc, tin) may release hydrogen gas. When calcium chloride

is being dissolved in water, large amounts of heat develop.

Hazardous polymerization May polymerize when exposed to heat.

Conditions to avoid Exposure to water or moisture. Avoid excessive heat for prolonged periods of time. Dust

formation.

Incompatible materials Moisture, Bromine trifluoride, Sulfuric acid, Sodium, Bromides, Oxidizing materials, Strong

acids, Strong bases, Strong oxidizing agents, 2-Furancarboxylic acid.

Hazardous decomposition products Does not decompose when used and stored as recommended.

11. Toxicological information

Information on likely routes of exposure

Product Information

Inhalation Specific test data for the substance or mixture is not available. May cause irritation of

respiratory tract. May cause drowsiness or dizziness.

Eye contact Specific test data for the substance or mixture is not available. Causes serious eye damage.

May cause irreversible damage to eyes.

Skin contact Specific test data for the substance or mixture is not available. Causes skin irritation. (based

on components).

Ingestion Specific test data for the substance or mixture is not available. Ingestion may cause

gastrointestinal irritation, nausea, vomiting and diarrhea. Harmful if swallowed. (based on

components).

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms Redness. Burning. May cause blindness. May cause redness and tearing of the eyes.

Inhalation of high vapor concentrations may cause symptoms like headache, dizziness.

tiredness, nausea and vomiting.

Acute toxicity Harmful if swallowed.

Numerical measures of toxicity

 Oral LD50
 1155 (rat) mg/kg

 Dermal LD50
 3094 (rat) mg/kg

 Inhalation LC50
 2800 (rat) (dust/mist)

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Calcium chloride	= 1000 mg/kg (Rat)	> 5000 mg/kg (Rabbit)	-
10043-52-4			

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 skin irritation.

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

damage.

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 May cause respiratory irritation. May cause drowsiness or dizziness.

STOT - repeated exposure May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard

Other adverse effects

No information available.

No information available.

No information available.

12. Ecological information

Ecotoxicity

Chemical name	Algae/aquatic plants	Fish	Toxicity to	Crustacea
			microorganisms	
Calcium chloride	-	LC50: =10650mg/L (96h,	-	LC50: 2280000 -
10043-52-4		Lepomis macrochirus)		3948000µg/L (48h,
		'		Daphnia magna)

Persistence and degradability No information available.

Bioaccumulation No information available.

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

DOTNot regulatedIATANot regulatedIMDGNot regulated

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 - Health hazards 3 Flammability 0 Physical hazards 0 Personal protection -

Chronic Hazard Star Legend *= Chronic Health Hazard

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	
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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

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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