Revision Date: 10/24/2022

# SAFETY DATA SHEET SPA FROG® Conditioning Cartridge

According to Appendix D, OSHA Hazard Communication Standard 29 CFR §1910.1200

### 1. Identification

# Product identifier

Product name SPA FROG® Conditioning Cartridge

# Recommended use of the chemical and restrictions on use

**Application** Spa and hot tub conditioner

**Uses advised against** Use only for intended applications.

# Details of the supplier of the safety data sheet

Manufacturer King Technology, Inc.

6000 Clearwater Dr. Minnetonka, MN 55343

United States 1+ (952) 933-6118

sdsinfo@kingtechnology.com

1+ (800) 424-9300 - Chemtrec (24 hours)

# **Emergency telephone number**

### **Emergency telephone**

### 2. Hazard(s) identification

# Classification of the substance or mixture

Physical hazards Met. Corr. 1 - H290

**Health hazards** Eye Dam. 1 - H318

Environmental hazards Not Classified

# Label elements

# **Pictogram**



Signal word Danger

Hazard statements H318 Causes serious eye damage.

H290 May be corrosive to metals.

**Precautionary statements** P234 Keep only in original container.

P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact

lenses, if present and easy to do. Continue rinsing. P310 Immediately call a poison center/ doctor. P390 Absorb spillage to prevent material damage.

P406 Store in corrosive resistant container with a resistant inner liner.

# 3. Composition/information on ingredients

### **Mixtures**

Revision Date: 10/24/2022

# SPA FROG® Conditioning Cartridge

Aluminum sulfate > 10.8%

CAS number: 10043-01-3

Classification

Met. Corr. 1 - H290 Eye Dam. 1 - H318

The full text for all hazard statements is displayed in Section 16.

### 4. First-aid measures

# Description of first aid measures

General information Get medical attention if any discomfort continues. Show this Safety Data Sheet to the medical

personnel.

**Inhalation** Move affected person to fresh air and keep warm and at rest in a position comfortable for

breathing. Loosen tight clothing such as collar, tie or belt. Get medical attention if symptoms

are severe or persist.

Ingestion Rinse mouth thoroughly with water. Get medical advice/attention if you feel unwell. Do not

induce vomiting unless under the direction of medical personnel.

**Skin Contact** Rinse with water.

Eye contact Rinse immediately with plenty of water. Do not rub eye. Remove any contact lenses and open

eyelids wide apart. Continue to rinse for at least 15 minutes and get medical attention.

**Protection of first aiders** First aid personnel should wear appropriate protective equipment during any rescue.

# Most important symptoms and effects, both acute and delayed

General information The severity of the symptoms described will vary dependent on the concentration and the

length of exposure.

**Inhalation** No specific symptoms known.

**Ingestion** No specific symptoms known.

**Skin contact** Prolonged contact may cause dryness of the skin.

**Eye contact** Causes serious eye damage. Symptoms following overexposure may include the following:

Pain. Profuse watering of the eyes. Redness.

# Indication of immediate medical attention and special treatment needed

**Notes for the doctor**Treat symptomatically.

# 5. Fire-fighting measures

# Extinguishing media

Suitable extinguishing media The product is not flammable. Extinguish with alcohol-resistant foam, carbon dioxide, dry

powder or water fog. Use fire-extinguishing media suitable for the surrounding fire.

Unsuitable extinguishing

media

Do not use water jet as an extinguisher, as this will spread the fire.

# Special hazards arising from the substance or mixture

Specific hazards None known.

Hazardous combustion

products

Thermal decomposition or combustion products may include the following substances:

Harmful gases or vapors.

Revision Date: 10/24/2022

# SPA FROG® Conditioning Cartridge

### Advice for firefighters

Protective actions during

firefighting

Avoid breathing fire gases or vapors. Evacuate area. Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Cool containers exposed to flames with water until well after the fire is out. Control run-off water by containing and keeping it out of sewers and watercourses. If risk of water pollution occurs, notify appropriate authorities.

Special protective equipment

for firefighters

Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing. Standard Firefighter's clothing including helmets, protective boots and gloves will provide a basic level of protection for chemical incidents.

### 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

Wear protective clothing as described in Section 8 of this safety data sheet. No action shall be Personal precautions

taken without appropriate training or involving any personal risk. Do not touch or walk into

spilled material.

**Environmental precautions** 

**Environmental precautions** Avoid discharge into drains or watercourses or onto the ground.

### Methods and material for containment and cleaning up

Methods for cleaning up

Wear protective clothing as described in Section 8 of this safety data sheet. Clear up spills immediately and dispose of waste safely. Collect spillage with a shovel and broom, or similar and reuse, if possible. Collect and place in suitable waste disposal containers and seal securely. Flush contaminated area with plenty of water. Wash thoroughly after dealing with a

spillage. For waste disposal, see Section 13.

Reference to other sections

For personal protection, see Section 8. See Section 11 for additional information on health hazards. See Section 12 for additional information on ecological hazards. For waste disposal, see Section 13.

# 7. Handling and storage

# Precautions for safe handling

Usage precautions Read and follow manufacturer's recommendations. Wear protective clothing as described in

> Section 8 of this safety data sheet. Keep away from food, drink and animal feeding stuffs. Keep container tightly sealed when not in use. Do not handle until all safety precautions have been read and understood. Do not handle broken packages without protective equipment. Do

not reuse empty containers.

Advice on general occupational hygiene Wash promptly if skin becomes contaminated. Take off contaminated clothing and wash

before reuse. Wash contaminated clothing before reuse.

# Conditions for safe storage, including any incompatibilities

Storage precautions Store away from incompatible materials (see Section 10). Keep only in the original container.

> Keep container tightly closed, in a cool, well ventilated place. Keep containers upright. Protect containers from damage. Store in corrosive resistant container with a resistant inner liner.

Storage class Chemical storage.

Specific end uses(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.

### 8. Exposure controls/Personal protection

#### Control parameters

Revision Date: 10/24/2022

# SPA FROG® Conditioning Cartridge

### Occupational exposure limits

US ACGIH. CAS 10043-01-3. Threshold limit value (TLV-TWA): 1 mg/m3 Canada (Alberta). CAS 10043-01-3. Time-weighted average (TWA): 2 mg/m3

UK. CAS 10043-01-3. Time-weighted average (TWA): 2 mg/m3 Denmark. CAS 10043-01-3. Time-weighted average (TWA): 1 mg/m3 France. CAS 10043-01-3. Time weighted average (VME): 2 mg/m3 Ireland. CAS 10043-01-3. Time-weighted average (TWA): 2 mg/m3 Italy. CAS 10043-01-3. Time-weighted average (TWA): 1 mg/m3 Norway. CAS 10043-01-3. Time-weighted average (TWA): 2 mg/m3 Portugal. CAS 10043-01-3. Time-weighted average (TWA): 1 mg/m3 Sweden. CAS 10043-01-3. Time-weighted average (TWA): 1 mg/m3

ACGIH = American Conference of Governmental Industrial Hygienists

Time-weighted average (TWA) = 8-hour exposure limit

#### **Exposure controls**

### Protective equipment



Appropriate engineering

controls

Provide adequate ventilation. Observe any occupational exposure limits for the product or

ingredients.

Eye/face protection Wear tight-fitting, chemical splash goggles or face shield. If inhalation hazards exist, a full-

face respirator may be required instead.

**Hand protection** No specific hand protection recommended.

Other skin and body

protection

Wear appropriate clothing to prevent repeated or prolonged skin contact.

Hygiene measures Wash after use and before eating, smoking and using the toilet. Do not eat, drink or smoke

when using this product.

Respiratory protection Ensure all respiratory protective equipment is suitable for its intended use and is NIOSH

approved. Check that the respirator fits tightly and the filter is changed regularly. Gas and combination filter cartridges should comply with OSHA 1910.134. Full face mask respirators with replaceable filter cartridges should comply with OSHA 1910.134. Half mask and quarter mask respirators with replaceable filter cartridges should comply with OSHA 1910.134.

Environmental exposure

controls

Keep container tightly sealed when not in use. Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

### 9. Physical and chemical properties

### Information on basic physical and chemical properties

**Appearance** Solid powder with small granules throughout.

Color White.

Odor Odorless.

Odor threshold No information available.

PH No information available.

Revision Date: 10/24/2022

# SPA FROG® Conditioning Cartridge

Melting point No information available.

**Initial boiling point and range** No information available.

Flash point No information available.

**Evaporation rate** No information available.

Flammability (solid, gas) No information available.

Upper/lower flammability or

explosive limits

No information available.

Vapor pressure No information available.

Vapor density No information available.

**Relative density** No information available.

Bulk density No information available.

**Solubility(ies)** No information available.

Partition coefficient No information available.

**Auto-ignition temperature** No information available.

**Decomposition Temperature** No information available.

**Viscosity** No information available.

**Explosive properties** No information available.

10. Stability and reactivity

**Reactivity** May be corrosive to metals.

Stable at normal ambient temperatures and when used as recommended. Stable under the

prescribed storage conditions.

Possibility of hazardous

reactions

No potentially hazardous reactions known.

**Conditions to avoid** Keep away from heat, sparks and open flame.

Materials to avoid Mild steel. Stainless steel. Aluminum. May be corrosive to metals.

Hazardous decomposition

products

Does not decompose when used and stored as recommended. Thermal decomposition or combustion products may include the following substances: Harmful gases or vapors.

### 11. Toxicological information

# Information on toxicological effects

Acute toxicity - oral

Notes (oral LD₅) Based on available data the classification criteria are not met.

Acute toxicity - dermal

Notes (dermal LD50) Based on available data the classification criteria are not met.

Acute toxicity - inhalation

Notes (inhalation LC50) Based on available data the classification criteria are not met.

Skin corrosion/irritation

Revision Date: 10/24/2022

# SPA FROG® Conditioning Cartridge

Animal data

Based on available data the classification criteria are not met.

Serious eye damage/irritation

Serious eye damage/irritation Eye Dam. 1 - H318 Causes serious eye damage.

Respiratory sensitization

**Respiratory sensitization** Based on available data the classification criteria are not met.

Skin sensitization

**Skin sensitization**Based on available data the classification criteria are not met.

Germ cell mutagenicity

**Genotoxicity - in vitro**Based on available data the classification criteria are not met.

Carcinogenicity

**Carcinogenicity** Based on available data the classification criteria are not met.

Reproductive toxicity

Reproductive toxicity - fertility Based on available data the classification criteria are not met.

Reproductive toxicity -

development

Based on available data the classification criteria are not met.

Specific target organ toxicity - single exposure

STOT - single exposure Not classified as a specific target organ toxicant after a single exposure.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure 
Not classified as a specific target organ toxicant after repeated exposure.

Aspiration hazard

Aspiration hazard Not relevant. Solid.

General information The severity of the symptoms described will vary dependent on the concentration and the

length of exposure.

Inhalation No specific symptoms known.

Ingestion No specific symptoms known.

**Skin Contact** Prolonged contact may cause dryness of the skin.

**Eye contact** Causes serious eye damage. Symptoms following overexposure may include the following:

Pain. Profuse watering of the eyes. Redness.

Route of exposure Ingestion Inhalation Skin and/or eye contact

Target Organs No specific target organs known.

12. Ecological information

**Ecotoxicity** Not regarded as dangerous for the environment. However, large or frequent spills may have

hazardous effects on the environment.

**Toxicity** Based on available data the classification criteria are not met.

Persistence and degradability

Persistence and degradability The degradability of the product is not known.

Revision Date: 10/24/2022

# SPA FROG® Conditioning Cartridge

**Bioaccumulative potential** 

Bio-Accumulative Potential No data available on bioaccumulation.

Partition coefficient No information available.

Mobility in soil

Mobility No data available.

Other adverse effects

Other adverse effects None known.

# 13. Disposal considerations

### Waste treatment methods

**General information** The generation of waste should be minimized or avoided wherever possible. Reuse or recycle

products wherever possible. This material and its container must be disposed of in a safe way. When handling waste, the safety precautions applying to handling of the product should be considered. Care should be taken when handling emptied containers that have not been thoroughly cleaned or rinsed out. Empty containers or liners may retain some product

residues and hence be potentially hazardous.

Disposal methods Do not empty into drains. Dispose of surplus products and those that cannot be recycled via a

licensed waste disposal contractor. Waste, residues, empty containers, discarded work clothes and contaminated cleaning materials should be collected in designated containers, labeled with their contents. Incineration or landfill should only be considered when recycling is

not feasible.

# 14. Transport information

General The product is not covered by international regulations on the transport of dangerous goods

(IMDG, IATA, DOT).

**UN Number** 

UN No. (International) Not applicable.

UN proper shipping name

Proper shipping name

(International)

Not applicable.

Transport hazard class(es)

Transport Labels (International)

No transport warning sign required.

**DOT transport labels** 

No transport warning sign required.

Packing group

Packing group (International) Not applicable.

**Environmental hazards** 

**Environmentally Hazardous Substance** 

No.

Special precautions for user

Not applicable.

**DOT TIH Zone** Not applicable.

Revision Date: 10/24/2022

# SPA FROG® Conditioning Cartridge

Transport in bulk according to Not applicable.

Annex II of MARPOL 73/78

and the IBC Code

### 15. Regulatory information

Safety, hygiene and environmental regulations / legislation specific for the substance or mixture:

# **US Federal Regulations**

# SARA Section 302 Extremely Hazardous Substances Tier II Threshold Planning Quantities

None of the ingredients are listed or exempt.

### CERCLA/Superfund, Hazardous Substances/Reportable Quantities (EPA)

The following ingredients are listed or exempt:

Aluminum sulfate

Final CERCLA RQ: 5000(2270) pounds (Kilograms)

### SARA Extremely Hazardous Substances EPCRA Reportable Quantities

None of the ingredients are listed or exempt.

### SARA 313 Emission Reporting

None of the ingredients are listed or exempt.

### **CAA Accidental Release Prevention**

None of the ingredients are listed or exempt.

# FDA - Essential Chemical

None of the ingredients are listed or exempt.

# FDA - Precursor Chemical

None of the ingredients are listed or exempt.

### SARA (311/312) Hazard Categories

None of the ingredients are listed or exempt.

# **OSHA Highly Hazardous Chemicals**

None of the ingredients are listed or exempt.

# **US State Regulations**

### California Proposition 65 Carcinogens and Reproductive Toxins

None of the ingredients are listed or exempt.

### California Air Toxics "Hot Spots" (A-I)

None of the ingredients are listed or exempt.

### California Air Toxics "Hot Spots" (A-II)

None of the ingredients are listed or exempt.

### California Directors List of Hazardous Substances

The following ingredients are listed or exempt:

Aluminum sulfate

Revision Date: 10/24/2022

# SPA FROG® Conditioning Cartridge

#### Massachusetts "Right To Know" List

All the ingredients are listed or exempt.

# Rhode Island "Right To Know" List

The following ingredients are listed or exempt:

#### Minnesota "Right To Know" List

The following ingredients are listed or exempt:

### New Jersey "Right To Know" List

All the ingredients are listed or exempt.

# Pennsylvania "Right To Know" List

All the ingredients are listed or exempt.

#### **Inventories**

### **EU - EINECS/ELINCS**

**EINECS** 

All the ingredients are listed or exempt.

ELINCS

None of the ingredients are listed or exempt.

#### Canada - DSL/NDSL

DSL

All the ingredients are listed or exempt.

**NDSL** 

None of the ingredients are listed or exempt.

#### US - TSCA

All the ingredients are listed or exempt.

# US - TSCA 12(b) Export Notification

None of the ingredients are listed or exempt.

# 16. Other information

Revision date 10/24/2022

Revision 01

**SDS No.** 478/6

Hazard statements in full H29~0 May be corrosive to metals.

H318 Causes serious eye damage.

The information provided on the SDS is correct to the best of our knowledge, information, and belief at the date of this publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal, and release, and is not to be considered as 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 material or in any process, unless specified in the text.