

## SAFETY DATA SHEET

### SPA FROG® Conditioning Cartridge

According to WHMIS 2015, in compliance with the Hazardous Product Act (HPA, as amended) and the requirements of the Hazardous Product Regulations (HPR)

#### 1. Identification

##### Product identifier

**Product name** SPA FROG® Conditioning Cartridge

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

**Restriction on use** 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.  
530 11th Ave S  
Hopkins, MN 55343  
United States  
1+ (952) 933-6118  
sdsinfo@kingtechnology.com

##### Emergency telephone number

**Emergency telephone** 1+ (800) 424-9300 - Chemtrec (24 hours)

#### 2. Hazard 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 packaging.  
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 a corrosion-resistant container with a resistant inner liner.

#### 3. Composition/information on ingredients

##### Mixtures

## SPA FROG® Conditioning Cartridge

<b>Aluminum sulfate</b>	<b>&gt; 10.8%</b>
CAS number: 10043-01-3	
<b>Classification</b>	
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

<b>General information</b>	Get medical attention if any discomfort continues. Show this Safety Data Sheet to the medical personnel.
<b>Inhalation</b>	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.
<b>Ingestion</b>	Rinse mouth thoroughly with water. Get medical advice/attention if you feel unwell. Do not induce vomiting unless under the direction of medical personnel.
<b>Skin contact</b>	Rinse with water.
<b>Eye contact</b>	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.
<b>Protection of first aiders</b>	First aid personnel should wear appropriate protective equipment during any rescue.

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

<b>General information</b>	The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
<b>Inhalation</b>	No specific symptoms known.
<b>Ingestion</b>	No specific symptoms known.
<b>Skin contact</b>	Prolonged contact may cause dryness of the skin.
<b>Eye contact</b>	Causes serious eye damage. Symptoms following overexposure may include the following: Pain. Profuse watering of the eyes. Redness.

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

<b>Notes for the doctor</b>	Treat symptomatically.
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### 5. Fire-fighting measures

#### Extinguishing media

<b>Suitable extinguishing media</b>	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.
<b>Unsuitable extinguishing media</b>	Do not use water jet as an extinguisher, as this will spread the fire.

#### Specific hazards arising from the hazardous product

<b>Specific hazards</b>	None known.
<b>Hazardous combustion products</b>	Thermal decomposition or combustion products may include the following substances: Harmful gases or vapours.

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### Advice for firefighters

#### **Protective actions during firefighting**

Avoid breathing fire gases or vapours. 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. Firefighter's clothing that provides a basic level of protection during chemical incidents is defined by the Canada Occupational Health and Safety Regulations, by provincial guidelines on occupational health and safety or by NFPA standards if applicable.

## 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

#### **Personal precautions**

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

#### **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. 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 use(s)

#### **Specific end use(s)**

The identified uses for this product are detailed in Section 1.

## 8. Exposure controls/Personal protection

## SPA FROG® Conditioning Cartridge

### Control parameters

#### Occupational exposure limits

US ACGIH. CAS 10043-01-3. Threshold limit value (TLV-TWA): 1 mg/m<sup>3</sup>  
Canada (Alberta). CAS 10043-01-3. Time-weighted average (TWA): 2 mg/m<sup>3</sup>  
UK. CAS 10043-01-3. Time-weighted average (TWA): 2 mg/m<sup>3</sup>  
Denmark. CAS 10043-01-3. Time-weighted average (TWA): 1 mg/m<sup>3</sup>  
France. CAS 10043-01-3. Time weighted average (VME): 2 mg/m<sup>3</sup>  
Ireland. CAS 10043-01-3. Time-weighted average (TWA): 2 mg/m<sup>3</sup>  
Italy. CAS 10043-01-3. Time-weighted average (TWA): 1 mg/m<sup>3</sup>  
Norway. CAS 10043-01-3. Time-weighted average (TWA): 2 mg/m<sup>3</sup>  
Portugal. CAS 10043-01-3. Time-weighted average (TWA): 1 mg/m<sup>3</sup>  
Sweden. CAS 10043-01-3. Time-weighted average (TWA): 1 mg/m<sup>3</sup>

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 the Canadian regulation on health and safety at work, SOR/86-304, Part XII (12.7), and any relevant provincial regulation relating to health and safety at work. Full face mask respirators with replaceable filter cartridges should comply with the Canadian regulation on health and safety at work, SOR/86-304, Part XII (12.7), and any relevant provincial regulation relating to health and safety at work. Half mask and quarter mask respirators with replaceable filter cartridges should comply with the Canadian regulation on health and safety at work, SOR/86-304, Part XII (12.7), and any relevant provincial regulation relating to health and safety at work.

#### **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.

## SPA FROG® Conditioning Cartridge

<b>Colour</b>	White.
<b>Odour</b>	Odourless.
<b>Odour threshold</b>	No information available.
<b>pH</b>	No information available.
<b>Melting point</b>	No information available.
<b>Initial boiling point and range</b>	No information available.
<b>Flash point</b>	No information available.
<b>Evaporation rate</b>	No information available.
<b>Flammability (solid, gas)</b>	No information available.
<b>Upper/lower flammability or explosive limits</b>	No information available.
<b>Vapour pressure</b>	No information available.
<b>Vapour density</b>	No information available.
<b>Relative density</b>	No information available.
<b>Bulk density</b>	No information available.
<b>Solubility(ies)</b>	No information available.
<b>Partition coefficient</b>	No information available.
<b>Auto-ignition temperature</b>	No information available.
<b>Decomposition Temperature</b>	No information available.
<b>Viscosity</b>	No information available.
<b>Explosive properties</b>	No information available.

### 10. Stability and reactivity

<b>Reactivity</b>	May be corrosive to metals.
<b>Stability</b>	Stable at normal ambient temperatures and when used as recommended. Stable under the prescribed storage conditions.
<b>Possibility of hazardous reactions</b>	No potentially hazardous reactions known.
<b>Conditions to avoid</b>	Keep away from heat, sparks and open flame.
<b>Materials to avoid</b>	Mild steel. Stainless steel. Aluminium. May be corrosive to metals.
<b>Hazardous decomposition products</b>	Does not decompose when used and stored as recommended. Thermal decomposition or combustion products may include the following substances: Harmful gases or vapours.

### 11. Toxicological information

#### Information on toxicological effects

#### Acute toxicity - oral

**Notes (oral LD<sub>50</sub>)** Based on available data the classification criteria are not met.

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**Acute toxicity - dermal**

**Notes (dermal LD<sub>50</sub>)** Based on available data the classification criteria are not met.

**Acute toxicity - inhalation**

**Notes (inhalation LC<sub>50</sub>)** Based on available data the classification criteria are not met.

**Skin corrosion/irritation**

**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.

<b>12. Ecological information</b>
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## SPA FROG® Conditioning Cartridge

<b>Ecotoxicity</b>	Not regarded as dangerous for the environment. However, large or frequent spills may have hazardous effects on the environment.
<b>Toxicity</b>	Based on available data the classification criteria are not met.
<b><u>Persistence and degradability</u></b>	
<b>Persistence and degradability</b>	The degradability of the product is not known.
<b><u>Bioaccumulative potential</u></b>	
<b>Bioaccumulative potential</b>	No data available on bioaccumulation.
<b>Partition coefficient</b>	No information available.
<b><u>Mobility in soil</u></b>	
<b>Mobility</b>	No data available.
<b><u>Other adverse effects</u></b>	
<b>Other adverse effects</b>	None known.

### 13. Disposal considerations

#### **Waste treatment methods**

<b>General information</b>	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.
<b>Disposal methods</b>	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

<b>General</b>	The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, TDG).
<b><u>UN number</u></b>	
<b>UN No. (International)</b>	Not applicable.
<b><u>UN proper shipping name</u></b>	
<b>Proper shipping name (International)</b>	Not applicable.
<b><u>Transport hazard class(es)</u></b>	
<b>Transport Labels (International)</b>	No transport warning sign required.
<b>DOT transport label</b>	
<b><u>Packing group</u></b>	
<b>Packing group (International)</b>	Not applicable.
<b><u>Environmental hazards</u></b>	

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### Environmentally hazardous substance/marine pollutant

No.

### Special precautions for user

Not applicable.

**DOT TIH Zone** Not applicable.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not applicable.

## 15. Regulatory information

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

### Inventories

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

EINECS

All the ingredients are listed or exempt.

ELINCS

None of the ingredients are listed or exempt.

#### **Canada – DSL/NDSL**

All the ingredients are listed or exempt.

#### **US - TSCA**

All the ingredients are listed or exempt.

## 16. Other information

<b>Revision date</b>	2018-09-14
<b>SDS number</b>	4786
<b>Hazard statements in full</b>	H290 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.