

SAFETY DATA SHEET

SPA FROG® Conditioning Cartridge

According to Regulation (EC) No 1907/2006, Annex II, as amended.

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name SPA FROG® Conditioning Cartridge
UFI No PRTD-80GP-W00M-R4QD

1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified uses Spa and hot tub conditioner
Uses advised against Use only for intended applications.

1.3. Details of the supplier of the safety data sheet

Manufacturer King Technology, Inc.
6000 Clearwater Dr.
Minnetonka, MN 55343
USA
001 (952) 933-6118
sdsinfo@kingtechnology.com

1.4. Emergency telephone number

Emergency telephone 001 (800) 424-9300 - Chemtrec (24 hours)
UK National Poisons Information Service (NPIS) 0870 600 6266 (24 hours)
National emergency telephone NHS Direct (England): 111
NHS Direct (Wales): 0845 46 47
NHS 24 (Scotland): 08454 24 24 24

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC No 1272/2008 as amended by GB-CLP Regulation, UK SI 2019/720, and UK SI 2020/1567)

Physical hazards Met. Corr. 1 - H290
Health hazards Eye Dam. 1 - H318
Environmental hazards Not classified

2.2. Label elements

Labelling (EC No 1272/2008 as amended by GB-CLP Regulation, UK SI 2019/720, and UK SI 2020/1567)

Hazard pictograms



Signal word Danger
Hazard statements H318 Causes serious eye damage.
H290 May be corrosive to metals
Precautionary statements P101 If medical advice is needed, have product container or label at hand.
P102 Keep out of reach of children.
P103 Read attached instructions before use
P280 Wear protective gloves
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 CENTRE/ doctor.
P390 Absorb spillage to prevent material damage.

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2.3. Other hazards

Other hazards

This mixture contains no PBT/vPvB substances $\geq 0.1\%$. The mixture does not contain components considered to have endocrine disrupting properties.

SECTION 3: Composition/information on ingredients

3.1. Substances

The product is a mixture.

3.2. Mixtures

Aluminum sulphate	10 - 20%
CAS number: 10043-01-3	
EC number: 233-135-0	
REACH status: registration not required (the annual tonnage of the substance does not require registration).	
Classification	
Met. Corr. 1 - H290	
Eye Dam. 1 - H318	

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

SECTION 4: First aid measures

4.1. Description of first aid measures

General information	Call a Poison Centre or doctor if you feel unwell. If medical advice is needed, have product container or label at hand. The granules are packaged in a pre-filled cartridge. Therefore, direct exposure to the mixture is not expected to occur if the cartridge is used in accordance with the prescribed use.
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	DO NOT induce vomiting. Spit product out of mouth as much as possible. Get medical attention immediately. Rinse mouth thoroughly with water.
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.

4.2. 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. The granules are packaged in a pre-filled cartridge. Therefore, direct exposure to the mixture is not expected to occur if the cartridge is used in accordance with the prescribed use.
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.

4.3. Indication of any immediate medical attention and special treatment needed

Notes for the doctor	Treat symptomatically.
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SECTION 5: Firefighting measures

5.1. 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.

5.2. 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: Very toxic or corrosive gases or vapours.

5.3. 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 conforming to European standard EN469 (including helmets, protective boots and gloves) will provide a basic level of protection for chemical incidents.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Wear protective equipment 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. Avoid inhalation of dust. Use suitable respiratory protection if ventilation is inadequate. Avoid contact with skin and eyes.

6.2. Environmental precautions

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

6.3. 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.

6.4. 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.

SECTION 7: Handling and storage

7.1. 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.

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7.2. 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.

7.3. Specific end use(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure controls/Personal protection

8.1. Control parameters

Occupational exposure limits

UK. CAS 10043-01-3. Time-weighted average (TWA): 2 mg/m³
(TWA = 8-hour exposure limit)

8.2. Exposure controls

The granules are packaged in a pre-filled cartridge. Therefore, direct exposure to the mixture is not expected to occur if the cartridge is used in accordance with its prescribed use.

Protective equipment

Appropriate engineering controls Provide adequate general and local exhaust ventilation. Ensure the ventilation system is regularly maintained and tested. Observe any occupational exposure limits for the product or ingredients.

Eye/face protection Not required under normal use (the granules are packaged in a pre-filled cartridge. Therefore, direct exposure to the mixture is not expected to occur if the cartridge is used in accordance with its prescribed use). In case of accidental release, wear tight-fitting, chemical splash goggles or face shield EN 166. If inhalation hazards exist, a full-face respirator may be required instead.

Hand protection Wear protective gloves EN 374. Material: PVC, Neoprene or Natural rubber. However, the granules are packaged in a pre-filled cartridge. Therefore, direct exposure to the mixture is not expected to occur if the cartridge is used in accordance with its prescribed use.

Other skin and body protection Not required under normal use. Wear appropriate clothing to prevent any possibility of skin contact or in case of accidental release (the granules are packaged in a pre-filled cartridge. Therefore, direct exposure to the mixture is not expected to occur if the cartridge is used in accordance with its prescribed use).

Hygiene measures Handle in accordance with good hygiene and safety practice. Wash hands after handling. Do not eat, drink or smoke when handling this product.

Respiratory protection Not required under normal use. In case of accidental release, use EN 140 half mask and quarter mask respirators with replaceable filter cartridges.

Environmental exposure controls Avoid release to the environment other than via the advised use of the product.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	White. Solid powder with small granules throughout.
Odour	Odourless.
Odour threshold	Not available.
pH	Not available. The product reacts with water.
Melting /freezing point	Not applicable.
Initial boiling point and boiling range	Not applicable.
Flash point	Not applicable.
Evaporation rate	Not applicable.
Flammability (solid, gas)	Not flammable

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Upper/lower flammability or explosive limit	Not applicable.
Vapour pressure	No information available.
Vapour density	Not applicable.
Relative density	No information available.
Solubility(ies)	No information available.
Partition coefficient n-octanol/water	No information available.
Auto-ignition temperature	No information available.
Decomposition Temperature	No information available.
Viscosity	Not applicable.
Explosive properties	Not applicable.
Oxidising properties	Not applicable.

9.2. Other information

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SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity May be corrosive to metals.

10.2. Chemical stability

Stability Stable at normal ambient temperatures and when used as recommended. Stable under the prescribed storage conditions.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions No potentially hazardous reactions known.

10.4. Conditions to avoid

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

10.5. Incompatible materials

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

10.6. Hazardous decomposition products

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

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Notes (oral LD₅₀) 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

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 sensitisation

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

Skin sensitisation

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

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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.

SECTION 12: Ecological information

12.1. Toxicity

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

12.2. Persistence and degradability

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

12.3. Bioaccumulative potential

Bioaccumulative potential No data available on bioaccumulation.

Partition coefficient No information available.

12.4. Mobility in soil

Mobility No data available.

12.5. Results of PBT and vPvB assessment

No PBT and vPvB assessment has been carried out. This mixture contains no PBT/vPvB substances $\geq 0.1\%$

12.6. Other adverse effects

The mixture does not contain components considered to have endocrine disrupting properties.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Unused packaging Discard according to the local regulations as hazardous waste. Do not discharge product in sewage and drainage systems which lead to waterways.

Contaminated packaging Dispose of contents/container in accordance with local regulations.

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SECTION 14: Transport information

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

14.1. UN number or ID number

Not applicable

14.2. UN proper shipping name

Not applicable

14.3. Transport hazard class(es)

No transport warning sign required.

14.4. Packing group

Not applicable

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant: No

14.6. Special precautions for user

Not applicable

14.7. Maritime transport in bulk according to IMO instruments and the IBC Code

Transport in bulk Not applicable.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

EU legislation Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended). UK REACH (Regulation (EC) No 1907/2006 as retained in the UK with effect from 1st January 2021 and as amended).

Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures as amended by GB-CLP Regulation, UK SI 2019/720, and UK SI 2020/1567.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

Classification abbreviations and acronyms Met. Corr.: Corrosive to metals
Eye Dam.: Serious eye damage

Abbreviations and acronyms used in the safety data sheet CAS: Chemical Abstracts Service.
ATE: Acute Toxicity Estimate.
LC₅₀: Lethal Concentration to 50 % of a test population.
LD₅₀: Lethal Dose to 50% of a test population (Median Lethal Dose).
EC₅₀: 50% of maximal Effective Concentration.
PBT: Persistent, Bioaccumulative and Toxic substance.
vPvB: Very Persistent and Very Bioaccumulative.

Classification procedures according to Regulation (EC) 1272/2008 Eye Dam. 1 - H318: Calculation method.
Met. Corr. 1 - H290: Expert judgement.

Revision date 07/01/2025

SDS number 4786

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Hazard statements in full H290 May be corrosive to metals.
 H318 Causes serious eye damage.

Version 2

This safety data sheet replaces any previous version.

Changes in sections 1.1, 2.2, 4.1, 8.2, 10.1.

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.

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