SAFETY DATA SHEET

BROMINE GRANULES

Compilation date: 10/07/2015

Revision date: 05/09/2019

Revision No: 4

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

1.1. Product identifier

Product name: BROMINE GRANULES

Product code: ONPRM044

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

Use of substance / mixture: Swimming pool treatment.

1.3. Details of the supplier of the safety data sheet

Company name: A & R Products
Pilvington Mill
Pluckley
Ashford
Kent
TN27 0PG

Tel: 01233 841855

Email: mail@arproducts.co.uk

1.4. Emergency telephone number

Section 2: Hazards identification

2.1. Classification of the substance or mixture

Classification under CLP: Acute Tox. 4: H302; Aquatic Acute 1: H400; Aquatic Chronic 1: H410; Eye Irrit. 2: H319; STOT SE 3: H335; -: EUH031

Most important adverse effects: Harmful if swallowed. Causes serious eye irritation. May cause respiratory irritation. Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects. Contact with acids liberates toxic gas.

2.2. Label elements

Label elements:

Hazard statements: H302: Harmful if swallowed.
H319: Causes serious eye irritation.
H335: May cause respiratory irritation.
H400: Very toxic to aquatic life.
H410: Very toxic to aquatic life with long lasting effects.
EUH031: Contact with acids liberates toxic gas.

Hazard pictograms: GHS07: Exclamation mark
GHS09: Environmental

[cont...]

Signal words: Warning

Precautionary statements: P102: Keep out of reach of children.
P261: Avoid breathing dust.
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P337+P313: If eye irritation persists: Get medical advice/attention.
P270: Do not eat, drink or smoke when using this product.
P271: Use only outdoors or in a well-ventilated area.
P352: Wash with plenty of water.
P273: Avoid release to the environment.
P301+P310: IF SWALLOWED: Immediately call a POISON CENTER or doctor.
P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P312: Call a POISON CENTRE or doctor if you feel unwell.
P330: Rinse mouth.
P391: Collect spillage.
P403+P233: Store in a well-ventilated place. Keep container tightly closed.
P405: Store locked up.
P501: Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

2.3. Other hazards

PBT: This product is not identified as a PBT/vPvB substance.

Section 3: Composition/information on ingredients

3.2. Mixtures

Hazardous ingredients:

TROCLOSENE SODIUM, DIHYDRATE

EINECS	CAS	PBT / WEL	CLP Classification	Percent
220-767-7	51580-86-0	-	Acute Tox. 4: H302; Eye Irrit. 2: H319; STOT SE 3: H335; Aquatic Chronic 1: H410; Aquatic Acute 1: H400; -: EUH031	>90%

Contains: Sodium Bromide Salts.

[cont...]

Section 4: First aid measures

4.1. Description of first aid measures

Skin contact: Remove all contaminated clothes and footwear immediately unless stuck to skin. Drench the affected skin with running water for 10 minutes or longer if substance is still on skin. Transfer to hospital if there are burns or symptoms of poisoning.

Eye contact: Bathe the eye with running water for 15 minutes. Transfer to hospital for specialist examination.

Ingestion: Do not induce vomiting. If conscious, give half a litre of water to drink immediately. If unconscious, check for breathing and apply artificial respiration if necessary. If unconscious and breathing is OK, place in the recovery position. Transfer to hospital as soon as possible.

Inhalation: Remove casualty from exposure ensuring one's own safety whilst doing so. If unconscious, check for breathing and apply artificial respiration if necessary. If unconscious and breathing is OK, place in the recovery position. If conscious, ensure the casualty sits or lies down. If breathing becomes bubbly, have the casualty sit and provide oxygen if available. Transfer to hospital as soon as possible.

4.2. Most important symptoms and effects, both acute and delayed

Skin contact: There may be irritation and redness at the site of contact. Blistering may occur.

Eye contact: There may be pain and redness.

Ingestion: It is unlikely that this substance will be swallowed due to its physical properties. There may be soreness and redness of the mouth and throat.

Inhalation: Exposure may cause coughing or wheezing. There may be congestion of the lungs causing severe shortness of breath. There may be loss of consciousness. Convulsions may occur.

Delayed / immediate effects: Immediate effects can be expected after short-term exposure.

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

Immediate / special treatment: Eye bathing equipment should be available on the premises.

Section 5: Fire-fighting measures

5.1. Extinguishing media

Extinguishing media: Carbon dioxide. Alcohol or polymer foam. Dry chemical powder.

5.2. Special hazards arising from the substance or mixture

Exposure hazards: In combustion emits toxic fumes.

5.3. Advice for fire-fighters

Advice for fire-fighters: Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes.

[cont...]

Section 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions: Mark out the contaminated area with signs and prevent access to unauthorised personnel. Do not create dust.

6.2. Environmental precautions

Environmental precautions: Do not discharge into drains or rivers. Contain the spillage using bunding.

6.3. Methods and material for containment and cleaning up

Clean-up procedures: Mix with sand or vermiculite. Neutralise with dilute hydrochloric acid. Wash the spillage site with large amounts of water.

6.4. Reference to other sections

Reference to other sections: Refer to section 8 of SDS.

Section 7: Handling and storage

7.1. Precautions for safe handling

Handling requirements: Ensure there is sufficient ventilation of the area. Avoid direct contact with the substance.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Store in a cool, well ventilated area. Keep container tightly closed.

7.3. Specific end use(s)

Specific end use(s): No data available.

Section 8: Exposure controls/personal protection

8.1. Control parameters

Hazardous ingredients:

TROCLOSENE SODIUM, DIHYDRATE

Workplace exposure limits: **Respirable dust**

State	8 hour TWA	15 min. STEL	8 hour TWA	15 min. STEL
UK	0.5ppm/1.5mg/m3 Chlorin	1.0ppm/2.9mg/m3 (Chlorine)	4mg/m3 Respirable	10mg/3 (Total)

DNEL/PNEC Values

DNEL / PNEC No data available.

8.2. Exposure controls

Engineering measures: Ensure there is sufficient ventilation of the area.

Respiratory protection: No specific recommendations , but respiratory protection may be required under exceptional circumstances. Use a dust mask with EN149 FFP2 filter if exposure to dust is expected.

Hand protection: PVC gloves. Butyl gloves. Nitrile gloves. Viton gloves. Rubber gloves. Neoprene gloves.

[cont...]

Chemical resistant protective gloves (EN 374) Breakthrough time of the glove material > 1 hour.

Eye protection: When handling this product, the use of safety glasses with side shields is recommended. The applicable European Standard can be found in EN 166.

Skin protection: Protective clothing with elasticated cuffs and closed neck. Boots made of PVC. Ensure safety shower is to hand.

Section 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

State: Powder

Colour: White

Odour: Perceptible odour

Oxidising: Non-oxidising (by EC criteria)

Solubility in water: Soluble

9.2. Other information

Other information: No data available.

Section 10: Stability and reactivity

10.1. Reactivity

Reactivity: Stable under recommended transport or storage conditions.

10.2. Chemical stability

Chemical stability: Stable under normal conditions.

10.3. Possibility of hazardous reactions

Hazardous reactions: Hazardous reactions will not occur under normal transport or storage conditions. Decomposition may occur on exposure to conditions or materials listed below.

10.4. Conditions to avoid

Conditions to avoid: Heat.

10.5. Incompatible materials

Materials to avoid: Acids. Reducing agents.

10.6. Hazardous decomposition products

Haz. decomp. products: Contact with acids liberates toxic gas.

Section 11: Toxicological information

11.1. Information on toxicological effects

[cont...]

Toxicity values:

Route	Species	Test	Value	Units
ORAL	RBT	LD50	735	mg/kg

Hazardous ingredients:

TROCLOSENE SODIUM, DIHYDRATE

ORAL	RBT	LD50	735	mg/kg

Relevant hazards for product:

Hazard	Route	Basis
Acute toxicity (ac. tox. 4)	ING	Hazardous: calculated
Serious eye damage/irritation	OPT	Hazardous: calculated
STOT-single exposure	INH	Hazardous: calculated

Symptoms / routes of exposure

Skin contact: There may be irritation and redness at the site of contact. Blistering may occur.

Eye contact: There may be pain and redness.

Ingestion: It is unlikely that this substance will be swallowed due to its physical properties. There may be soreness and redness of the mouth and throat.

Inhalation: Exposure may cause coughing or wheezing. There may be congestion of the lungs causing severe shortness of breath. There may be loss of consciousness. Convulsions may occur.

Delayed / immediate effects: Immediate effects can be expected after short-term exposure.

Section 12: Ecological information

12.1. Toxicity

Ecotoxicity values:

Species	Test	Value	Units
Fish	96H LC50	0.22	mg/l

Hazardous ingredients:

TROCLOSENE SODIUM, DIHYDRATE

Fish	96H LC50	0.22	mg/l

12.2. Persistence and degradability

Persistence and degradability: Only slightly biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential: Bioaccumulation potential.

[cont...]

12.4. Mobility in soil

Mobility: Soluble in water.

12.5. Results of PBT and vPvB assessment

PBT identification: This product is not identified as a PBT/vPvB substance.

12.6. Other adverse effects

Other adverse effects: Do not allow concentrated product to enter rivers or water courses. Toxic to aquatic organisms.

Section 13: Disposal considerations

13.1. Waste treatment methods

Disposal operations: Disposal should be carried out by licenced contractors. Transfer to a suitable container and arrange for collection by specialised disposal company. Disposal to a special waste disposal plant, in accordance with local council regulations. Do not allow entry to drains or waterways. Do not place product spillages, full or partially full containers into waste skips or waste compactors.

Disposal of packaging: Containers must be disposed of in a safe way.

NB: The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

Section 14: Transport information

14.1. UN number

UN number: UN3077

14.2. UN proper shipping name

Shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (TROCLOSENE SODIUM, DIHYDRATE)

14.3. Transport hazard class(es)

Transport class: 9

14.4. Packing group

Packing group: III

14.5. Environmental hazards

Environmentally hazardous: Yes **Marine pollutant:** No

14.6. Special precautions for user

Special precautions: No special precautions.

Tunnel code: E

Transport category: 3

[cont...]

Section 15: Regulatory information

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

15.2. Chemical Safety Assessment

Section 16: Other information

Other information

Other information: This safety data sheet is prepared in accordance with Commission Regulation (EU) No 2015/830.

* indicates text in the SDS which has changed since the last revision.

Phrases used in s.2 and s.3: EUH031: Contact with acids liberates toxic gas.

H302: Harmful if swallowed.

H319: Causes serious eye irritation.

H335: May cause respiratory irritation.

H400: Very toxic to aquatic life.

H410: Very toxic to aquatic life with long lasting effects.

Legal disclaimer: The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.