Revision: 8 September 2020

SAFETY DATA SHEET

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

1.1 Product identifier

- Datasheet Number: SP601 Version 2.0.0
- Product Name: Bromine Spa Starter
- Chemical Name: Sodium bromide
- CAS No.: 7647-15-6
- EC No.: 231-599-9
- REACH Registration Number: 01-2119490106-41

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

- Use of the substance/mixture: Pool / spa treatment
- Use advised against: No information available

1.3 Details of the supplier of the safety data sheet

- Name of Supplier: Total Pool Chemicals Ltd
- Address of Supplier: Unit 1-5 , Pool Bank Business Park
  High Street, Tarvin
  Chester
  UK
  CH3 8JH
- Telephone: +44 (0)1829 740290
- Email: sales@totalpool.co.uk

1.4 Emergency telephone number

- +44 (0)1829 740290 (Office Hours)

## SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

- Classification (REGULATION (EC) No 1272/2008) [CLP/GHS]: Not Classified
- Additional information: For full text of Hazard- and EU Hazard-statements: see section 16

2.2 Label elements

- Hazard pictograms: None
- Signal Word: None
- Hazard statements
  None
- Precautionary statements
  None
- Supplemental Hazard information (EU)
  None

2.3 Other hazards

- Not a PBT according to REACH Annex XIII
- Not a vPvB according to REACH Annex XIII

## SECTION 3: Composition/information on ingredients

3.1 Substances

## SECTION 3: Composition/information on ingredients (....)

- Sodium bromide
  Conc.: ≥ 98%
  CAS No.: 7647-15-6
  EC No.: 231-599-9
  Classification (REGULATION (EC) No 1272/2008) [CLP/GHS]: Not classified
  REACH Registration Number: 01-2119490106-41

3.2 Mixtures

- Not applicable

## SECTION 4: First aid measures

4.1 Description of first aid measures

- Contact with eyes
  If substance has got into eyes, immediately wash out with plenty of water for several minutes
  Irrigate eyes thoroughly whilst lifting eyelids
  Remove contact lenses, if present and easy to do. Continue rinsing.
  If eye irritation persists: Get medical advice/attention.
- Contact with skin
  Wash affected area with plenty of soap and water
  Take off contaminated clothing and wash it before reuse.
  If skin irritation occurs: Get medical advice/attention.
- Ingestion
  Rinse mouth with water (do not swallow)
  Give plenty of water to drink
  When in doubt or symptoms persist, seek medical attention
- Inhalation
  No hazard expected under normal conditions of use
  IF exposed or concerned: Get medical advice/attention.

4.2 Most important symptoms and effects, both acute and delayed

- Contact with eyes
  May cause redness and irritation
- Contact with skin
  May cause redness and irritation
- Ingestion
  The ingestion of significant quantities may cause nausea/vomiting
  Has central nervous system effects
- Inhalation
  No hazard expected under normal conditions of use

4.3 Indication of any immediate medical attention and special treatment needed

- Treat symptomatically
- Dehydration may need to be corrected by further administration of fluids. Experimental work has shown that the kidney preferentially retains bromide at the expense of chloride. Therefore, large doses of chloride have to be given in order to increase the excretion of total halide. Recommended treatment includes: Administration of sodium chloride in doses as high as 4 g every 4 hours to those patients that can take it. Gastric irritation may necessitate reduced doses. Supplementary administration of saline solution by other routes (4000 cc per day) may also be performed. Patients in congestive failure should receive ammonium chloride to avoid excess retention of sodium.
  Perkins H.A. (1950) Bromide Intoxication, Analysis of cases, from a General Hospital, Arch. Internl. Med., vol. 85, pp., 783-794.

## SECTION 5: Firefighting measures

5.1 Extinguishing media

- Suitable extinguishing media: Not flammable. In case of fire use extinguishing media appropriate to surrounding conditions
- Unsuitable extinguishing media: No information available

5.2 Special hazards arising from the substance or mixture

- Gives off irritating or toxic fumes (or gases) in a fire.
- Decomposition products may include bromine, sodium oxide, oxygen, oxides of bromine, sodium bromate and hydrogen bromide
- Very slippery when wet

5.3 Advice for firefighters

- Collect contaminated fire extinguishing water separately. This MUST not be discharged into drains. Prevent fire extinguishing water from contaminating surface or ground water.
- Special protective equipment: Wear self-contained breathing apparatus (SCBA). Wear full protective clothing including chemical protection suit.

## SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

- Rescuers should take suitable precautions to avoid becoming casualties themselves
- Only trained and authorised personnel should carry out emergency response
- Personal precautions for non-emergency personnel: Do not breathe dust; Avoid contact with skin and eyes; Wear protective clothing as per section 8; Wash thoroughly after handling.
- Personal precautions for emergency responders: Wear self-contained breathing apparatus (SCBA); Wear suitable protective clothing, eye/face protection and gloves

6.2 Environmental precautions

- Avoid release to the environment.
- Do not allow to enter public sewers and watercourses
- If contamination of drainage systems or water courses is unavoidable, immediately inform appropriate authorities

6.3 Methods and material for containment and cleaning up

- Stop leak if safe to do so.
- Avoid formation of dust

- Small spills
  Wipe up spillage with damp absorbent cloth or towel

- Large spills
  Sweep or shovel-up spillage and remove to a safe place
  Place in sealable container
  Seal containers and label them
  Remove contaminated material to safe location for subsequent disposal
  Seek expert advice for removal and disposal of all contaminated materials and wastes
  Flush spill area with copious amounts of water

6.4 Reference to other sections

- See section(s): 7, 8 & 13

## SECTION 7: Handling and storage

7.1 Precautions for safe handling

## SECTION 7: Handling and storage (....)

- Use only in well ventilated areas
- Avoid contact with skin and eyes
- Avoid raising dust
- Do not breathe dust
- Wear protective clothing as per section 8
- Do not eat, drink or smoke when using this product.
- Contaminated clothing should be laundered before reuse
- Use good personal hygiene practices
- Wash thoroughly after handling.
- Ensure eyewash stations and safety showers are nearby

7.2 Conditions for safe storage, including any incompatibilities

- Keep in a cool, dry, well ventilated place
- Protect from heat
- Protect from light
- Protect from moisture
- Keep container tightly closed.
- Keep away from food, drink and animal feedingstuffs
- Incompatible with strong acids
- Incompatible with strong oxidizing substances

7.3 Specific end use(s)

- Pool / spa treatment

## SECTION 8: Exposure controls/personal protection

8.1 Control parameters

- If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.
  Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace exposure - Measurement of exposure by inhalation to chemical agents - Strategy for testing compliance with occupational exposure limit values). European Standard EN 14042 (Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents). European Standard EN 482 (Workplace exposure. General requirements for the performance of procedures for the measurement of chemical agents). Reference to national guidance documents for methods for the determination of hazardous substances will also be required.
- The UK HSE (EH40) recommends the following limits for dusts: 10 mg/m³ (8hr TWA) total inhalable dust; 4 mg/m³ (8hr TWA) total respirable dust
- DNEL (inhalational) 4.75 mg/m³ Industry, Long Term, Systemic Effects
- DNEL (dermal) 95 mg/kg (bw/day) Industry, Long Term, Systemic Effects
- DNEL (dermal) 95 mg/kg (bw/day) Industry, Acute/Short Term, Systemic Effects
- DNEL (inhalational) 1.66 mg/m³ Consumer, Long Term, Systemic Effects
- DNEL (dermal) 95 mg/kg (bw/day) Consumer, Long Term, Systemic Effects
- DNEL (dermal) 95 mg/kg (bw/day) Consumer, Acute/Short Term, Systemic Effects
- DNEL (oral) 475 µg/kg (bw/day) Consumer, Long Term, Systemic Effects
- DNEL (oral) 42 mg/kg (bw/day) Industry, Acute/Short Term, Systemic Effects
- PNEC aqua (freshwater) 150 µg/l
- PNEC aqua (intermittent releases, freshwater) 208 µg/l
- PNEC aqua (marine water) 75 µg/l
- PNEC (STP) 100 mg/l
- PNEC terrestrial (soil) 3.2 mg/kg
- PNEC secondary poisoning (food) 3.333 mg/kg

8.2 Exposure controls

- Selection and use of personal protective equipment should be based on a risk assessment of exposure potential

## SECTION 8: Exposure controls/personal protection (....)

- Engineering controls
  Ensure adequate ventilation
  Engineering controls should be provided which maintain airborne concentrations as low as practicable
- Respiratory protection
  No respiratory protection is needed during normal handling, if dust is formed, wear approved dust mask
- Eye/face protection
  Wear safety glasses approved to standard EN 166.
- Skin protection
  Wear protective gloves. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and standard EN 374.
  The selection of a suitable glove depends on work conditions and whether the product is present on its own or in combination with other substances. Breakthrough time is dependent on the characteristics of the brand of glove used and the supplier should be consulted.
- Hygiene measures
  Do not eat, drink or smoke when using this product.
  Use good personal hygiene practices
  Wash thoroughly after handling.
- Environmental exposure controls
  Do not empty into drains
  Do not allow to penetrate the ground/soil.

## SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

- Appearance: White crystalline solid or powder
- Odour: None
- Odour threshold: No information available
- pH: 5.5 - 8 (5% solution)
- Melting point/freezing point: 747 - 757.7 °C @ 101.3 - 101.325 kPa
- Initial boiling point and boiling range: 1 390 °C @ 101.3 - 101.325 kPa
- Flashpoint: No information available
- Evaporation Rate: No information available
- Flammability (solid,gas): Not flammable
- Upper/lower flammability or explosive limits: Not applicable
- Vapour Pressure: 0 Pa @ 25 °C
- Vapour Density: Not applicable
- Relative Density: 3.21 @ 25 °C
- Solubility(ies): Solubility in water: 909 - 946 g/L @ 25 °C and pH 6.5 - 8 (sodium bromide)
- Partition Coefficient (n-Octanol/Water): No information available
- Autoignition Temperature: No information available
- Decomposition temperature: No information available
- Viscosity: Not applicable
- Explosive Properties: Non-explosive
- Oxidising properties: Not oxidising

9.2 Other information

## SECTION 9: Physical and chemical properties (....)

- No information available

## SECTION 10: Stability and reactivity

10.1 Reactivity

- Stable under normal conditions

10.2 Chemical stability

- Stable under normal conditions

10.3 Possibility of hazardous reactions

- Can react dangerously with: bromine trifluoride

10.4 Conditions to avoid

- Avoid overheating

10.5 Incompatible materials

- Incompatible with strong oxidizing substances
- Incompatible with strong acids
- Incompatible with salts of metals

10.6 Hazardous decomposition products

- Decomposition products may include bromine, sodium oxide, oxygen, oxides of bromine, sodium bromate and hydrogen bromide

## SECTION 11: Toxicological information

11.1 Information on toxicological effects

- Acute Toxicity
  Based on available data, the classification criteria are not met
  LD50 (oral, rat): 4 200 mg/kg
  LD50 (dermal, rabbit): 2 000 mg/kg
- Skin corrosion/irritation
  Based on available data, the classification criteria are not met
- Serious eye damage/irritation
  Based on available data, the classification criteria are not met
- Respiratory or skin sensitisation
  Based on available data, the classification criteria are not met
- Germ cell mutagenicity
  No evidence of mutagenic effects
- Carcinogenicity
  No evidence of carcinogenic effects
- Reproductive toxicity
  No evidence of reproductive effects
- Specific target organ toxicity (STOT) - single exposure
  Based on available data, the classification criteria are not met
- Specific target organ toxicity (STOT) - repeated exposure
  Based on available data, the classification criteria are not met
- Aspiration hazard
  Based on available data, the classification criteria are not met

## SECTION 11: Toxicological information (....)

- Contact with eyes
  May cause redness and irritation
- Contact with skin
  May cause redness and irritation
- Ingestion
  The ingestion of significant quantities may cause nausea/vomiting
  Has central nervous system effects
- Inhalation
  No hazard expected under normal conditions of use

## SECTION 12: Ecological information

12.1 Toxicity

- Based on available data, the classification criteria are not met
- LC50 (fish) 440 - 24 000 mg/l (4 days)
- EC50 (aquatic invertebrates) 1 - 5.8 g/l (48 hr)
- EC50 (aquatic algae) 8 - 20 000 mg/l (72 hr)

12.2 Persistence and degradability

- Sodium bromide r is an inorganic salt that fully dissociates in the aquatic environment to form bromide and sodium ions. It also undergoes degradation in soil to bromide ions (no further degradation or biodegradation will occur).

12.3 Bioaccumulative potential

- BCF (dimensionless) 909 - 946 g/L @ 25 °C and pH 6.5 - 8

12.4 Mobility in soil

- No information available

12.5 Results of PBT and vPvB assessment

- Not a PBT according to REACH Annex XIII
- Not a vPvB according to REACH Annex XIII

12.6 Other adverse effects

- No information available

## SECTION 13: Disposal considerations

13.1 Waste treatment methods

- Disposal should be in accordance with local, state or national legislation
- Do not discharge into drains or the environment, dispose to an authorised waste collection point
- Do not reuse empty containers without commercial cleaning or reconditioning

13.2 Classification

- The waste must be identified according to the List of Wastes (2000/532/EC)
- Hazardous Property Code(s): None assigned

## SECTION 14: Transport information

Not classified as hazardous for transport

14.1 UN number

## SECTION 14: Transport information (....)

- UN No.: Not applicable

14.2 UN proper shipping name

- Proper Shipping Name: Not applicable

14.3 Transport hazard class(es)

- Hazard Class: Not applicable

14.4 Packing group

- Packing Group: Not applicable

14.5 Environmental hazards

- Not Classified

14.6 Special precautions for user

- No information available

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

- Not applicable

14.8 Road/Rail (ADR/RID)

- Proper Shipping Name: Not applicable
- ADR UN No.: Not applicable
- ADR Hazard Class: Not applicable
- ADR Packing Group: Not applicable
- Tunnel Code: Not applicable

14.9 Sea (IMDG)

- Proper Shipping Name: Not applicable
- IMDG UN No.: Not applicable
- IMDG Hazard Class: Not applicable
- IMDG Pack Group.: Not applicable

14.10 Air (ICAO/IATA)

- Proper Shipping Name: Not applicable
- ICAO UN No.: Not applicable
- ICAO Hazard Class: Not applicable
- ICAO Packing Group: Not applicable

## SECTION 15: Regulatory information

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

- This safety data sheet is provided in compliance with REACH Regulation (EC) No 1907/2006 as amended by Regulation (EU) 2015/830
- Regulation (EC) No. 1272/2008 on the classification, labelling and packaging of substances and mixtures (CLP Regulation) applies in Europe

15.2 Chemical safety assessment

- No information available

## SECTION 16: Other information

The statements made herein are based on our best present experience and are intended to describe product safety requirements. They should not therefore be considered as a warranty of specific properties.

## SECTION 16: Other information (....)

Sources of data: Information from published literature and supplier safety data sheets

Revision No. 2.0.0. Revised September 2020.
Changes made: Revisions to all sections to conform to Regulation (EU) 2015/830.

Text not given with phrase codes where they are used elsewhere in this safety data sheet:

- None assigned

Acronyms

- ATE: Acute Toxicity Estimate
- CAS: Chemical Abstracts Service
- DNEL: Derived No-Effect Level
- EC: European Community
- EC50: Effective Concentration, 50%
- GHS: Globally Harmonised System
- LC50: Lethal Concentration, 50%
- LD50: Lethal Dose, 50%
- NOAEC: No observed adverse effect concentration
- NOAEL: No observed adverse effect level
- OEL: Occupational Exposure Limit
- PBT: Persistent, Bioaccumulative and Toxic
- PNEC: Predicted No-Effect Concentration
- REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals
- SCL: Specific Concentration Limit
- vPvB: very Persistent and very Bioaccumulative
- WEL: Workplace Exposure Limit

--- end of safety datasheet ---