

## SAFETY DATA SHEET

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

## 1.1 Product identifier

- Product Name: pH Decreaser (SP 202)
- Chemical Name: Sodium hydrogensulphate
- Synonyms: Sodium bisulphate; dry acid
- CAS Number: 7681-38-1
- EC No.: 231-665-7
- Index No.: 016-046-00-X
- REACH Registration Number: 01-2119552465-36

## 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]: Eye Dam. 1, H318
- Additional information: For full text of Hazard- and EU Hazard-statements: see section 16

## 2.2 Label elements



- Signal Word: Danger
- Hazard statements  
H318 - Causes serious eye damage.
- Precautionary statements  
P102 - Keep out of reach of children.  
P280 - Wear eye/face protection  
P305+P351+P338+P310 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.  
P501 - Dispose of contents/container to an authorised waste collection point
- Supplemental Hazard information (EU)  
None

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**SECTION 2: Hazards identification (....)**

## 2.3 Other hazards

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

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**SECTION 3: Composition/information on ingredients**

## 3.1 Substances

- Sodium hydrogensulphate  
Concentration: 93 - 100%  
CAS Number: 7681-38-1  
EC Number: 231-665-7  
Index No.: 016-046-00-X  
Classification (REGULATION (EC) No 1272/2008) [CLP/GHS]: Eye Dam. 1, H318  
REACH Registration Number: 01-2119552465-36

## 3.2 Mixtures

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**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.  
Get immediate medical advice/attention.
- Contact with skin  
After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of soap and water  
Contaminated clothing should be laundered before reuse  
Get medical advice/attention.
- Ingestion  
Rinse mouth with water (do not swallow)  
Give plenty of water to drink  
Do NOT induce vomiting.  
Get immediate medical advice/attention.
- Inhalation  
If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.  
IF exposed or concerned: Get medical advice/attention.

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

- Contact with eyes  
Causes redness and swelling  
May cause severe damage with formation of corneal ulcers and permanent impairment of vision.
- Contact with skin  
May cause redness and irritation  
May cause blistering of the skin
- Ingestion  
May disturb the mucous membranes  
May cause stomach pain  
The ingestion of significant quantities may cause burning sensation

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**SECTION 4: First aid measures (....)**

- Inhalation
  - May cause respiratory tract irritation.
  - May cause shortness of breath
  - May cause coughing
  - May cause dry throat

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

- Treat symptomatically
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**SECTION 5: Firefighting measures**

## 5.1 Extinguishing media

- Suitable extinguishing media: dry powder; carbon dioxide; water spray; alcohol resistant foam
- Unsuitable extinguishing media: high volume water jet

## 5.2 Special hazards arising from the substance or mixture

- In a fire or if heated, a pressure increase will occur and the container may burst
- Contact with metals liberates flammable gas
- Gives off irritating or toxic fumes (or gases) in a fire.
- Decomposition products may include sulphur oxides
- Decomposition products may include sulphuric acid

## 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.
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**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: Avoid formation of dust; Do not breathe dust; 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; Natural rubber are recommended

## 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.
  - Small spills
    - Wipe up spillage with damp absorbent cloth or towel
  - Large spills
    - Avoid formation of dust
    - 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
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**SECTION 6: Accidental release measures (....)**

## 6.4 Reference to other sections

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

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**SECTION 7: Handling and storage**

## 7.1 Precautions for safe handling

- Use only in well ventilated areas
- Avoid contact with metals
- Avoid contact with skin and eyes
- Prevent formation of 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
- Contaminated work clothing should not be allowed out of the workplace.
- 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
- Keep container tightly closed.
- Protect from moisture.
- Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- Incompatible with metals
- Keep away from food, drink and animal feedingstuffs

## 7.3 Specific end use(s)

- Pool / spa treatment

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**SECTION 8: Exposure controls/personal protection**

## 8.1 Control parameters

- For currently recommended monitoring procedures, see HSE series 'Methods for the Determination of Hazardous Substances' (MDHS)
- The UK HSE (EH40) recommends the following limits for dusts: 10 mg/m<sup>3</sup> (8hr TWA) total inhalable dust; 4 mg/m<sup>3</sup> (8hr TWA) total respirable dust
- PNEC aqua (freshwater) 11.09 mg/l
- PNEC aqua (intermittent releases, freshwater) 17.66 mg/l
- PNEC aqua (marine water) 1.109 mg/l
- PNEC (STP) 800 mg/l
- PNEC sediment (freshwater) 40.2 mg/kg
- PNEC sediment (marine water) 4.02 mg/kg
- PNEC terrestrial (soil) 1.54 mg/kg

## 8.2 Exposure controls

- Selection and use of personal protective equipment should be based on a risk assessment of exposure potential
- Engineering controls
  - Ensure adequate ventilation
  - Engineering controls should be provided to prevent the need for ventilation
  - Use local exhaust ventilation and/or enclosures.
- Respiratory protection
  - In case of insufficient ventilation, wear suitable respiratory equipment
  - Where a reusable half mask respirator is required, use EN 140 mask and EN 143 particle filter, or EN 1827
  - Where a full face mask respirator is required, use EN 136, with particle filter EN 143

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

- Eye/face protection  
Wear goggles giving complete eye protection 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.  
PVC or rubber gloves are recommended  
Wear suitable protective clothing  
Contaminated work clothing should not be allowed out of the workplace.  
Contaminated clothing should be laundered before reuse
- Hygiene measures  
Do not eat, drink or smoke when using this product.  
Use good personal hygiene practices  
Wash thoroughly after handling.  
Ensure eyewash stations and safety showers are nearby
- 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, light yellow, granular crystals
- Odour: None
- Odour threshold: No information available
- pH: 1.3 @ 20°C
- Melting point/freezing point: 315 °C @ 101.3 kPa
- Initial boiling point and boiling range: No information available
- Flashpoint: Not applicable
- Evaporation Rate: No information available
- Flammability (solid,gas): Not flammable
- Upper/lower flammability or explosive limits: Not applicable
- Vapour Pressure: Not applicable
- Vapour Density: Not applicable
- Relative Density: 2.43 - 2.44 @ 20 °C
- Solubility(ies): Solubility in water: 285 g/L @ 25 °C
- Partition Coefficient (n-Octanol/Water): Not applicable
- Autoignition Temperature: No information available
- Decomposition temperature: 460°C
- Viscosity: No information available
- Explosive Properties: Not applicable
- Oxidising properties: Not oxidising

### 9.2 Other information

- No information available

**SECTION 10: Stability and reactivity**

## 10.1 Reactivity

- Contact with metals liberates flammable gas

## 10.2 Chemical stability

- Hygroscopic

## 10.3 Possibility of hazardous reactions

- Reacts with metals liberating hydrogen

## 10.4 Conditions to avoid

- Avoid formation of dust
- Keep away from heat and moisture

## 10.5 Incompatible materials

- Incompatible with metals
- Incompatible with alkalis (strong bases)

## 10.6 Hazardous decomposition products

- Decomposition products may include sulphur oxides
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**SECTION 11: Toxicological information**

The aqueous solution has the same properties as sulphuric acid

## 11.1 Information on toxicological effects

- Acute Toxicity  
Based on available data, the classification criteria are not met  
LD50 (oral, rat) (sulphuric acid) 2 140 mg/kg bw  
LC50 (inhalation, rat) (sodium sulphate) > 2 400 mg/m<sup>3</sup>/4h
- Skin corrosion/irritation  
Based on available data, the classification criteria are not met
- Serious eye damage/irritation  
Causes serious eye damage.
- 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  
NOAEL (oral, rat): 1 000 mg/kg bw/day (sodium sulphate)
- Aspiration hazard  
Based on available data, the classification criteria are not met
- Contact with eyes  
Causes redness and swelling  
May cause severe damage with formation of corneal ulcers and permanent impairment of vision.
- Contact with skin  
May cause redness and irritation

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

- May cause blistering of the skin
  - Ingestion
    - May disturb the mucous membranes
    - May cause stomach pain
    - The ingestion of significant quantities may cause burning sensation
  - Inhalation
    - May cause respiratory tract irritation.
    - May cause shortness of breath
    - May cause coughing
    - May cause dry throat
  - Other information
    - In contact with water the product forms sulphuric acid that can cause burns.
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**SECTION 12: Ecological information**

## 12.1 Toxicity

- Based on available data, the classification criteria are not met
- LC50 (fish) 7.96 g/l (4 days)
- LC50 (aquatic invertebrates) 1.766 g/l (48 hr)
- EC50 (aquatic algae): 1.9 g/l

## 12.2 Persistence and degradability

- Degrades by hydrolysis

## 12.3 Bioaccumulative potential

- Not applicable; inorganic

## 12.4 Mobility in soil

- Large volumes may penetrate soil and contaminate groundwater

## 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

- May cause adverse effects in the aquatic environment due to low pH
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**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): HP 4 Irritant
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**SECTION 14: Transport information**

Not classified as hazardous for transport

## 14.1 UN number

- UN No.: Not applicable

## 14.2 UN proper shipping name

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

- 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

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**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
- A REACH chemical safety assessment has been carried out

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**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.

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

Revision No. 2.0.0. Revised October 2019.

Changes made: Revisions to all sections to conform to Regulation (EU) 2015/830.



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

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

- H318: Causes serious eye damage

### Acronyms

- 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%
- NOEC: No observed 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
- vPvB: very Persistent and very Bioaccumulative
- WEL: Workplace Exposure Limit

--- end of safety datasheet ---

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