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**SAFETY DATA SHEET**


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

## 1.1 Product identifier

- **UFI No:** **RT10-H04V-E00T-9GY5**
- Product Name: pH Minus
- Product Part Number: 021
- Chemical Name: Sodium hydrogensulphate
- Synonyms: Sodium bisulphate; dry acid
- CAS No.: 7681-38-1
- EC No.: 231-665-7
- Index No.: 016-046-00-X
- REACH Registration Number: 01-2119552465-36-XXXX

## 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: Plastica Ltd
- Address of Supplier: Perimeter House  
Napier Road  
St Leonards-on-Sea  
East Sussex  
United Kingdom  
TN38 9NY
- Telephone: +44 (0) 1424 857857
- Email: info@plasticapools.net

## 1.4 Emergency telephone number

- Emergency Telephone: 0800 043 0891 (technical)  
0800 043 0892 (emergency)

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**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 protective gloves/protective clothing/eye protection/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

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

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

## 3.1 Substances

Chemical Name	Conc.	CAS No.	EC No.	Classification (REGULATION (EC) No 1272/2008) [CLP/GHS]	SCL/ M-Factor/ ATE	REACH Registration Number	WEL/ OEL
Sodium hydrogensulphate	> 93 %	7681-38-1	231-665-7	Eye Dam. 1, H318	-	01-2119552465-36-XXXX	No

## 3.2 Mixtures

- Not applicable
- 

**SECTION 4: First aid measures**

## 4.1 Description of first aid measures

- 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.
- Contact with eyes  
If substance has got into eyes, immediately wash out with plenty of water for at least 15 minutes  
Irrigate eyes thoroughly whilst lifting eyelids  
Remove contact lenses, if present and easy to do. Continue rinsing.  
Get immediate medical advice/attention.
- Ingestion  
Rinse mouth with water (do not swallow)  
Give plenty of water to drink  
Do NOT induce vomiting.  
Get 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  
Causes redness and irritation  
May cause blistering of the skin
  - Ingestion  
May disturb the mucous membranes
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**SECTION 4: First aid measures (....)**

- 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
- 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
- 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
  - Personal precautions for emergency responders:
  - No action shall be taken involving any personal risk or without suitable training
  - 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 appropriate container
    - Seal containers and label them

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**SECTION 6: Accidental release measures (....)**

- 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

- 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.
- Keep away from food, drink and animal feedingstuffs
- Incompatible with metals

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

### 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
  - Respiratory protection: Particle filter P2
- Eye/face protection
  - Wear goggles giving complete eye protection approved to standard EN 166.
- Skin protection
  - Wear suitable protective clothing
  - 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.
  - Suitable glove material: Rubber (natural, latex). Chloroprene rubber. Butyl rubber. Polyvinyl chloride (PVC).
    - Thickness:  $\geq 0.5$  mm
    - Nitrile rubber.
    - Thickness:  $\geq 0.35$  mm
    - Viton rubber (fluoro rubber).
    - Thickness:  $\geq 0.4$  mm
    - Breakthrough time: > 480 minutes.
- Hygiene measures
  - Do not eat, drink or smoke when using this product.
  - Use good personal hygiene practices
  - Contaminated work clothing should not be allowed out of the workplace.
  - Contaminated clothing should be laundered before reuse
  - Wash thoroughly after handling.
  - Ensure eyewash stations and safety showers are nearby
- Environmental exposure controls
  - Do not allow to enter public sewers and watercourses
  - 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 solid
- Odour: None
- Odour threshold: No information available
- pH: No information available

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

- 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: Not determined
- Solubility(ies): Solubility in water: 285 g/L @ 25 °C
- Partition Coefficient (n-Octanol/Water): Not applicable. Substance is inorganic.
- Auto-ignition temperature: No information available
- Decomposition temperature: 460°C
- Viscosity: No information available
- Explosive Properties: Not applicable
- Oxidising Properties: Not oxidising

**9.2 Other information**

- Molecular weight: 120.06
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**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
- Reactions with the following materials may cause explosions: calcium hypochlorite, starch, sodium carbonate.
- The following materials may react violently with the product: acetic anhydride.

**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)
- Incompatible with strong oxidizing substances
- Incompatible with calcium hypochlorite, starch, sodium carbonate, acetic anhydride.

**10.6 Hazardous decomposition products**

- Decomposition products may include sulphur oxides
- 

**SECTION 11: Toxicological information****11.1 Information on toxicological effects**

- Acute Toxicity  
Based on available data, the classification criteria are not met  
LD<sub>50</sub> (oral, rat) 2 140 mg/kg bw  
Read-across data. Sulphuric acid (H<sub>2</sub>SO<sub>4</sub>)
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**SECTION 11: Toxicological information (....)**

- LC<sub>50</sub> (inhalation, rat) > 2.4 mg/L (4 h)  
Read-across data. Sodium sulphate  
Test method(s): OECD 436.
- Skin corrosion/irritation  
Based on available data, the classification criteria are not met  
Erythema/eschar score: No erythema (0).  
Oedema score: No oedema (0).  
Test method(s): OECD 404.
  - Serious eye damage/irritation  
Causes serious eye damage  
Test method(s): OECD 405.
  - Respiratory or skin sensitisation  
Based on available data, the classification criteria are not met  
Guinea pig maximization test (GPMT): Not sensitising.  
Read-across data. Sodium sulphate.  
Test method(s): OECD 406.
  - Germ cell mutagenicity  
No evidence of mutagenic effects  
Gene mutation: Negative.  
Read-across data. Sodium sulphate.  
Test method(s): OECD 476.
  - Carcinogenicity  
No evidence of carcinogenic effects
  - Reproductive toxicity  
No evidence of reproductive effects  
Reproductive toxicity - fertility  
Screening: NOEL 1 000 mg/kg/day, oral, rat  
Read-across data. Sodium sulphate.  
Test method(s): OECD 421.  
  
Reproductive toxicity - development  
Developmental toxicity: NOAEL: 2 800 mg/kg/day, oral, mouse  
Read-across data. Sodium sulphate.
  - 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  
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

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

- May cause coughing
  - May cause dry throat
  - Other information
    - In contact with water the product forms sulphuric acid that can cause burns
- 

**SECTION 12: Ecological information**

## 12.1 Toxicity

- Based on available data, the classification criteria are not met
- LC<sub>50</sub> (fish) 7.96 g/L (4 days)
- LC<sub>50</sub> (aquatic invertebrates) 1.766 g/L (48 h)
- EC<sub>50</sub> (aquatic algae) 1.9 g/L
- Chronic toxicity (aquatic invertebrates): NOEC (7 days) 1 109 mg/L, Ceriodaphnia dubia

## 12.2 Persistence and degradability

- Not applicable; inorganic

## 12.3 Bioaccumulative potential

- Not applicable; inorganic

## 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): HP 4 Irritant
- 

**SECTION 14: Transport information**

Not classified as hazardous for transport

## 14.1 UN number or ID number

- 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
-

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

## 14.4 Packing group

- Packing Group: Not applicable

## 14.5 Environmental hazards

- Not Classified

## 14.6 Special precautions for user

- Not Classified
- No special precautions are required for this product

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

- Not Classified

## 14.8 Road/Rail (ADR/RID)

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

## 14.9 Sea (IMDG)

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

## 14.10 Air (ICAO/IATA)

- ICAO UN No.: Not applicable
  - Proper Shipping Name: 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

- A REACH chemical safety assessment has been carried out
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**SECTION 16: Other information**

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of PLASTICA'S limited knowledge and belief, accurate, and reliable as of the date of authorisation of this safety data sheet. However, no representation, warranty or guarantee is made as to its accuracy, reliability or completeness. It is the user's responsibility to be satisfied as to the suitability and completeness of such information for the product as used.

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

Revision No. 2.0.0. Revised December 2020.

Changes made: Updated to conform to latest version of REACH

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**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**

- ATE: Acute Toxicity Estimate
- CAS: Chemical Abstracts Service
- DNEL: Derived No-Effect Level
- EC: European Community
- EC<sub>50</sub>: Effective Concentration, 50%
- GHS: Globally Harmonised System
- LC<sub>50</sub>: Lethal Concentration, 50%
- LD<sub>50</sub>: Lethal Dose, 50%
- NOAEL: No observed adverse effect level
- NOEC: No observed effect concentration
- 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 ---

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