

SAFETY DATA SHEET

1. Identification of the substance/preparation and of the company/undertaking

1.1 Product Identifier	Sodium Hydrogen Sulfate		
Trade Name:	pH Minus		
Other Names:	Sodium Bisulphate, Dry Acid		
Reach Registration No:	01-2119552465-36-0003		
1.2 Relevant Identified uses of the substance or mixture and uses advised against	Uses: Swimming Pool water treatments		
1.3 Details of the supplier of the safety data sheet	Company: Complete Pool Controls Ltd Unit 2, The Park Stoke Orchard Bishops Cleeve Gloucestershire GL52 7RS		
Telephone:	+44 (0) 8712 229081	Fax:	+44 (0) 8712 229083
E-mail:	sales@cpc-chemicals.co.uk		
1.4 Emergency Telephone	Tel: +44 (0) 8712 229081 (office hours) +44 (0) 1242 300271 (outside of office hours)		

2. Hazard Identification**2.1 Classification of the substance or mixture****Classification according to Regulation (EC) No 1272/2008**


Hazard Class	Hazard Category	Target Organs	Hazard Statements
Eye Dam	1		H318

For the full text of the H statements mentioned in this section see Section 16.

Most important adverse effects

Human Health:	See section 11 for toxicological information
Physical & Chemical Hazards:	See section 9 for physicochemical information
Potential environmental effects:	See section 12 for environmental information

2.2 Label elements**Labelling according to Regulation (EC) No 1272/2008**

Hazard symbols:	
Signal word:	Danger
Hazard statements:	H318: Causes serious eye damage
Precautionary statements:	
Prevention:	P280: Wear protective gloves/protective clothing/eye protection/face protection
Response:	P305+351+338: IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing P308+310: If exposed or concerned: Immediately call a POISON CENTRE or doctor/physician P501: Dispose of contents / container to an approved waste disposal plant

Hazardous components which must be listed on the label Not relevant

2.3 Other Hazards Results of PBT and vPvB assessment not required (inorganic)

Trade Name: pH Minus

3. Composition/information on ingredients

3.1 Substance

Chemical Name	CAS-No.	EC-No.	Index-No.	%	H & R
Sodium Hydrogen Sulfate	7681-38-1	231-665-7	16-046-00-X	93 - 100%	H318

Full text of H- and EUH-phrases: see section 16.

3.2 Mixtures Not applicable

4. First Aid measures

4.1 Description of first aid measures

General Advice: Take off all contaminated clothing immediately.

If Inhaled: Move to Fresh air. Call a physician immediately

In case of skin contact: Wash off immediately with plenty of soap & water. If irritation persists seek medical advice

In case of eye contact: Rinse immediately with plenty of water, also under eyelids for at least 15 minutes. Remove contact lenses. Call a physician immediately.

If swallowed: Do NOT induce vomiting. Drink plenty of water. Consult a physician.

Additional Information: IF exposed or concerned: Get medical advice/attention
If medical advice is needed, have product container or label at hand

4.2 Most important symptoms and effects, both acute and delayed

Inhalation: May cause irritation of respiratory tract. Inhalation may provoke the following symptoms: Shortness of breath, cough, dry/sore throat.

Skin contact: May be irritating. Skin contact may provoke the following symptoms: Redness, pain,

Eye contact: Causes serious eye damage. Eye contact may provoke the following symptoms: Redness, pain.

Ingestion: Ingestion may cause irritation to mucous membranes. Ingestion may provoke the following symptoms: Abdominal pain, burning sensation.

4.3 Indication of immediate medical attention and special treatment needed

Treatment: No further information available

5. Fire fighting measures

5.1 Extinguishing media:

Suitable media: Use dry chemical, CO₂, water spray or alcohol resistant foam.

Unsuitable media: High volume water jet

5.2 Special hazards arising from the substance or mixture

Fire Hazard: Non-flammable substance

Specific Hazards e: Burning produces noxious and toxic fumes. SO₂, NaOx
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
The pressure in sealed containers can increase under the influence of heat.
Vapours may form explosive mixture with air
Vapours are heavier than air and may spread along the floor.

5.3 Advice for fire-fighters

Advice for fire-fighters: In the event of fire, wear self-contained breathing apparatus. In the event of fire, cool tanks with water spray

6. Accidental release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions: Wear protective clothing as per Section 8
 Evacuate the area and keep personnel upwind
 Avoid breathing gas / mist / fumes. Avoid contact with skin and eyes
 Eye wash bottles should be available

6.2 Environmental precautions Do not allow to enter public sewers and watercourses

6.3 Methods and materials for containment and cleaning up

Cleaning up Prevent further leakage or spillage if safe to do so.
 Place in sealed and labelled appropriate containers. Remove contaminated material to safe location for subsequent disposal. Local authorities should be advised if significant spillages cannot be contained

6.4 Reference to other sections For personal protection see Section 8
 For disposal considerations see Section 13

7. Handling and storage

7.1 Precautions for safe handling

Advice on safe handling: Storage and handling must take place in conformity with national laws: GO70STORA025. Avoid contact with skin and eyes. Avoid dust formation. Do not breathe dust. Ensure that eye flushing systems and safety showers are located close to the working place.

Hygiene measures: Handle in accordance with good industrial hygiene and safety practice. When using, do not eat, drink or smoke. Wash hands before breaks and immediately after handling the product. Keep away from food, drink and animal feeding stuffs. Wash contaminated clothing before re-use. Keep working clothes separately.

7.2 Conditions for safe storage, including any incompatibilities.

Storage areas: Store in dry, cool, well-ventilated area. Keep containers dry and tightly closed to avoid moisture absorption and contamination. Keep container closed and dry. Keep away from open flames, hot surfaces and sources of ignition

7.3 Specific end uses No information available

8. Exposure control/personal protection

8.1 Control parameters

Exposure Limits No information available

PNEC		
Freshwater	11.09	mg/l
Marinewater	1.11	mg/l
Intermittent release	17.66	mg/l
Sediment (Freshwater)	40.2	mg/kg sediment dw
Sediment (Marinewater)	4.02	mg/kg sediment dw
Soil 1.54	1.54	mg/kg soil dw
STP	800	mg/l

8. Exposure control/personal protection**8.2 Exposure controls****Personal protective equipment**

The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection	Respirator with a full face mask (EN136). Recommended Filter type: ABEK/P2 (EN141). Wear self-contained breathing apparatus when entering area unless atmosphere is proved to be safe (EN138/269 - EN137 - EN139).
Hand protection	Rubber gloves (EN 374): PVC. The selection of specific gloves for a specific application and time of use in a working area, should also take into account other factors on the working space, such as (but not limited to): other chemicals that are possibly used, physical requirements (protection against cutting/drilling, skill, thermal protection), and the instructions/specification of the supplier of gloves.
Eye protection	Tightly fitting safety goggles (EN166)
Skin and body protection	Chemical-resistant overalls.
Thermal hazard protection:	Not required under normal use. Use dedicated equipment.
Engineering measures	Ensure adequate ventilation. Use only in area provided with appropriate exhaust ventilation. Ensure that eyewash stations and safety showers are close to the workstation location. Eye wash bottle with pure water. Organisational measures to prevent /limit releases, dispersion and exposure. See also section 7.

Environmental exposure controls

General advice: Do not flush into surface water or sanitary sewer systems. Avoid subsoil penetration.

9. Physical and chemical properties**9.1 Information on basic physical and chemical properties**

Form:	Crystals, granular
Colour:	White, light yellow
Odour:	none
pH @ 20°C:	1.3
Melting point:	315°C
Boiling point:	Not known
Flash point:	Not applicable
Evaporation rate:	Not applicable
Flammability (solid, gas)	Not applicable
Explosion limits	Not applicable
Vapour pressure	Not applicable
Vapour density	Not applicable
Relative density	1,4 - 1,5 kg/l
Water solubility:	ca 1080 g/l 2 @ 25°C
Solubility in other solvents	Not applicable
Partition coefficient:n-octanol/water:	-2,2 (KOWWIN
Autoignition temperature	Not applicable
Thermal decomposition:	460°C
Explosive properties:	Not applicable

9.2 Other Information

No further information available

10. Stability and reactivity

10.1 Reactivity	See also section 10.5
10.2 Chemical stability	Hydroscopic
10.3 Possibility of hazardous reactions	Acidic aqueous solution. Gives off hydrogen by reaction with metals.
10.4 Conditions to avoid	Avoid dust formation, moisture and heat. See also Section 7
10.5 Incompatible materials	Hydrolyses in presence of: Water, acidic aqueous solution. Gives off hydrogen by reaction with metals. See also section 7
10.6 Hazardous decomposition products	Possible decomposition products are: Acidic aqueous solution. Gives off hydrogen by reaction with metals. Vapours may form explosive mixture with air.

11. Toxicological Information**11.1 Information on toxicological effects**

Acute toxicity : Not classified (Not classified due to data which are conclusive although insufficient for classification.)

Sodium hydrogensulphate (7681-38-1)			
LD50	oral - rat	2140 mg/kg	sulfuric acid
LC50	inhalation/4h - rat	> 2400 mg/m ³	sodium sulphate

Skin corrosion/irritation

Not classified (Not classified due to data which are conclusive although insufficient for classification.) pH: 1,3

Serious eye damage/irritation

Causes serious eye damage. pH: 1,3

Respiratory or skin sensitisation

Not classified (Not classified due to data which are conclusive although insufficient for classification.)

Germ cell mutagenicity

Not classified (Not classified due to data which are conclusive although insufficient for classification.)

Carcinogenicity

Not classified (Not classified due to data which are conclusive although insufficient for classification.)

Reproductive toxicity

Not classified (Not classified due to data which are conclusive although insufficient for classification.)

Specific target organ toxicity (single exposure)

Not classified (Not classified due to data which are conclusive although insufficient for classification.)

Specific target organ toxicity (repeated exposure)

Not classified (Not classified due to data which are conclusive although insufficient for classification.)

Aspiration hazard

Not classified (Not classified due to data which are conclusive although insufficient for classification.)

Further information

Watery solution: same properties as H₂SO₄. Fine granules, crystals or powder. Fine substance that can cause the irritation of the airways, with coughing and the contraction of the airways. In contact with water the product forms sulphuric acid that can cause burns.

Trade Name: pH Minus

12. Ecological Information

12.1 Toxicity
Eotoxicity effects Toxic to aquatic organisms

Sodium hydrogensulphate (7681-38-1)				
LC50	96h	fish	7960	mg/l
EC50	48h	daphnia	1766	mg/l
IC50	72h	algae	1900	mg/l

12.2 Persistence and degradability Hydrolysis in water

12.3 Bioaccumulative potential Low bioaccumulation potential
Partition coefficient: n-octanol/water -2,2 (KOWWIN)

12.4 Mobility in soil Highly mobile in soil

12.5 Results of PBT and PvB assessment Results of PBT and vPvB assessment: Not required (inorganic)

12.6 Other adverse effects No information available

13. Disposal Considerations

13.1 Waste treatment methods

Product: Disposal together with normal waste is not allowed. Handle with care. Special disposal required according to local regulations. Do not let product enter drains. Contact waste disposal services.

Contaminated packaging: Dispose of in accordance with local regulations

European Waste Catalogue No: Classified as hazardous waste according to European Union regulation. (06 03 03) Waste codes should be assigned by the user based on the application for which the product was used.

14. Transport Information

Not classified as dangerous in the meaning of transport regulation

14.1 UN Number Not applicable
14.2 UN proper shipping name Sodium Hydrogen Sulfate
14.3 Transport hazard class(es) Not applicable
14.4 Packaging Group Not applicable
14.5 Environmental hazards Not applicable
14.6 Special precautions for user Not applicable

15. Regulatory information

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

15.1.1 EU- Regulations

This Safety Data Sheet is provided in compliance with REACH Regulation (EC) No 1907/2006

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15. Regulatory information

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

15.1.1 EU- Regulations

TSCA (US): OK AICS (Australia): OK DSL (Canada): OK ENCS (Japan): OK ECL (Korea): OK PICCS (Philippines): OK Authorisations/Restrictions on use : Not applicable.

This product contains an ingredient according to the candidate list of Annex XIV of the REACH Regulation 1907/2006/EC. : None.

15.1.2 National Regulations

Germany

VwVwS Annex reference : Water hazard class (WGK) 1, low hazard to waters (Classification according to VwVwS, Annex 4)

12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV : Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)

Netherlands

SZW-lijst van kankerverwekkende stoffen : None of the components are listed

SZW-lijst van mutagene stoffen : None of the components are listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding : None of the components are listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid : None of the components are listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling : None of the components are listed

15.2 Chemical Safety Assessment

A chemical safety assessment has been carried out for this substance

16. Other information

Full text of H-statements referred to under sections 2 and 3

Eye Dam 1

H318 Causes serious eye damage

This information is believed to be accurate and represents the best information currently available to us. However, we make no warranty or merchantability, or fitness for any particular use, or any other warranty, express or implied, with respect to this information, and we assume no liability resulting from use of this information. Users should make their own investigations to determine the suitability of the information for their particular needs and uses.

Rev 6

Indicates updated section