

Safety Data Sheet

AMBIO pH Control

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name : AMBIO pH Control
 EC no : 215-687-4
 CAS No : 1344-09-8
 Formula : Na₂SiO₃=Na₂O.SiO₂

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

Relevant identified uses

Main use category : Professional use
 Use of the substance/mixture : For alkalization of drinking water (pH control) and as a corrosion inhibitor.

Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Ambio Ingeniørtjenester AS
 Godesetdalen 10, 4034 Stavanger
 Norway - Norge
 T +47 51446400 - F +47 51446401
post@ambio.no

Contact person : Bjørn Pedersen (E-mail: bjornp@ambio.no)

1.4. Emergency telephone number

Country	Organisation/Company	Address	Emergency number
Norway	Giftinformasjonen Directorate of Health and Social Affairs	P.O. Box 7000, St. Olavs Plass 0130 Oslo	112/ +47 22 59 13 00
United Kingdom	National Poisons Information Service (Newcastle Unit)	Claremont Place Newcastle-upon-Tyne, Newcastle	+44 191 2606182/+44 191 2606180 24H

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Not classified

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP] No labelling applicable

2.3. Other hazards

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substance

Not applicable

3.2. Mixture

Comment : Mol ratio of SiO₂ and Na₂O is 3.31. Tests conducted by CEFIC shows that sodium silicate solutions with mol ratio ratio > 3.2 and solid content less than 40% by weight, is not subject to labelling

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
water	(CAS No) 7732-18-5 (EC no) 231-791-2 (REACH-no) N/A	40 - 100	Not classified
sodium silicate solution, mol ratio 3,31, solids <40 %	(CAS No) 1344-09-8 (EC no) 215-687-4 (REACH-no) 01-2119448725-31	30 - 60	Not classified

Full text of H-statements: see section 16

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

First-aid measures general	: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
First-aid measures after inhalation	: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if any discomfort continues.
First-aid measures after skin contact	: Wash skin with soap and water. Get medical attention if any discomfort continues.
First-aid measures after eye contact	: Immediately flush with plenty of water for up to 15 minutes. Remove any contact lenses and open eyes wide apart. Get medical attention if any discomfort continues.
First-aid measures after ingestion	: Rinse nose, mouth and throat with water. DO NOT induce vomiting. Get medical attention immediately.

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

Symptoms/injuries after inhalation	: Inhalation of vapours may cause respiratory irritation.
Symptoms/injuries after skin contact	: Contact during a long period may cause slight irritation.
Symptoms/injuries after eye contact	: Liquid splashes in the eye may cause irritation.
Symptoms/injuries after ingestion	: Harmful if swallowed.

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

No specific first aid measures noted.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media	: Use fire-extinguishing media appropriate for surrounding materials.
Unsuitable extinguishing media	: Do not use extinguishing media containing water. Contact with metals produces hydrogen gas which may form explosive mixtures with air.

5.2. Special hazards arising from the substance or mixture

Fire hazard	: Not flammable according to national regulations concerning flammable goods.
Hazardous decomposition products in case of fire	: Carbon dioxide (CO ₂). Carbon monoxide (CO).

5.3. Advice for firefighters

Protection during firefighting	: Do not enter fire area without proper personal protective equipment, including respiratory protection.
--------------------------------	--

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

General measures	: Provide good ventilation. Avoid contact with skin and eyes.
------------------	---

For non-emergency personnel

Protective equipment	: Wear protective clothing as described in Section 8 of this safety data sheet.
Emergency procedures	: Keep public away from danger area.

For emergency responders

Protective equipment	: Equip cleanup crew with proper protection.
----------------------	--

6.2. Environmental precautions

Prevent entry to sewers and public waters.

6.3. Methods and material for containment and cleaning up

For containment	: Collect all waste in suitable and labelled containers and dispose according to local legislation.
Methods for cleaning up	: Absorb with inactive materials as vermiculite, sand, dolomite, diatomene etc. Deliver to approved reception facility. Collect and reclaim or dispose in sealed containers to licensed waste plant.

6.4. Reference to other sections

See section 13 for waste handling.

SECTION 7: HANDLING AND STORAGE**7.1. Precautions for safe handling**

Precautions for safe handling : Wear appropriate personal protective equipment - see Section 8. Provide sufficient ventilation during operations which cause vapour formation. Avoid contact with skin and eyes. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

Hygiene measures : Do not eat, drink or smoke when using this product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep container tightly closed. Protect against frost. Store in a dry place.

Incompatible products : May attack light-alloy metals and liberate hydrogen gas.

Incompatible materials : Refer to Section 10 on Incompatible Materials.

Storage temperature : 10 - 35 °C

7.3. Specific end use(s)

Consult the supplier for further information.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**8.1. Control parameters**

Additional information : Personal protective equipment should be selected according to the CEN standards and in cooperation with the supplier of personal protective equipment.

8.2. Exposure controls

Personal protective equipment : Gloves. Safety glasses.

Hand protection : Gloves are recommended for prolonged use. Neoprene, nitrile, polyethylene or PVC. Layer thickness : >0,20mm. Breakthrough time : >480min. STANDARD EN 374

Eye protection : Chemical goggles or safety glasses. STANDARD EN 166

Skin and body protection : Wear appropriate clothing to prevent any possibility of skin contact

Respiratory protection : Normally not required



Other information : Do not eat, drink or smoke during use.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**9.1. Information on basic physical and chemical properties**

Physical state : Liquid

Colour : clear.

Odour : none to slight.

Odour threshold : No data available

pH : < 11.5

Relative evaporation rate (butylacetate=1) : No data available

Melting point : No data available

Freezing point : No data available

Boiling point : No data available

Flash point : No data available

Auto-ignition temperature : No data available

Decomposition temperature : No data available

Flammability (solid, gas) : Non flammable

Vapour pressure : No data available

Relative vapour density at 20 °C : No data available

Relative density : No data available

Density : 1.36 g/cm³

Solubility : Very soluble in water.

Log Pow : No data available

Viscosity, kinematic : No data available

Viscosity, dynamic	: 70 - 100 mPa.s
Explosive properties	: Not explosive.
Oxidising properties	: Non flammable.
Explosive limits	: No data available

9.2. Other information

Additional information : None to our knowledge

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

No incompatible groups noted.

10.2. Chemical stability

Stable under normal temperature conditions and recommended use.

10.3. Possibility of hazardous reactions

In contact with some metals and water/humid air, hydrogen gas is formed, which may form explosive mixture with air.

10.4. Conditions to avoid

In contact with some metals and water/humid air, hydrogen gas is formed, which may form explosive mixture with air.

10.5. Incompatible materials

Strong acids. May attack light-alloy metals and liberate hydrogen gas.

10.6. Hazardous decomposition products

No decomposition if stored normally.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Acute toxicity : Not classified

sodium silicate solution, mol ratio 3,31, solids <40 % (1344-09-8)

LD50 oral rat	1960 mg/kg
LD50 dermal rabbit	> 4640 mg/kg

water (7732-18-5)

LD50 oral rat	90000 mg/kg bodyweight
---------------	------------------------

Skin corrosion/irritation : Not classified
pH: < 11.5

Serious eye damage/irritation : Not classified
pH: < 11.5

Respiratory or skin sensitisation : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : Not classified

Specific target organ toxicity (single exposure) : Not classified

Specific target organ toxicity (repeated exposure) : Not classified

Aspiration hazard : Not classified

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Ecology - general : Not regarded as dangerous to the environment. This does not, however, rule out the possibility that large or frequent smaller emissions of the product may be harmful to the environment. Large amounts of the product may affect the acidity (pH-factor) in water with possible risk of harmful effects to aquatic organisms.

Ecology - water : The product may affect the acidity (pH-factor) in water with risk of harmful effects to aquatic organisms.

AMBIO pH Control (1344-09-8)

LC50 fish 1	3185 mg/l (96 hours - Brachydanio rerio, zebra-fish)
EC50 Daphnia 1	4857 (48 hours - Daphnia magna)
EC50 other aquatic organisms 2	> 1000 mg/l (48 hours - Pseudomonas putida)

sodium silicate solution, mol ratio 3,31, solids <40 % (1344-09-8)

LC50 fish 1	1800 mg/l (96 hours - Gambusia affinis - Mosquito fish)
EC50 Daphnia 1	494 mg/l (48 hours - Daphnia magna)

12.2. Persistence and degradability**AMBIO pH Control (1344-09-8)**

Persistence and degradability	The chemical is readily biodegradable.
-------------------------------	--

12.3. Bioaccumulative potential**AMBIO pH Control (1344-09-8)**

Bioaccumulative potential	Not bioaccumulative.
---------------------------	----------------------

12.4. Mobility in soil**AMBIO pH Control (1344-09-8)**

Ecology - soil	The product is water soluble and may spread in water systems.
----------------	---

12.5. Results of PBT and vPvB assessment**AMBIO pH Control (1344-09-8)**

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
--

Component

water (7732-18-5)	This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
-------------------	--

12.6. Other adverse effects

Other adverse effects : No information.
 Additional information : Avoid release to the environment

SECTION 13: DISPOSAL CONSIDERATIONS**13.1. Waste treatment methods**

Regional legislation (waste) : Product is not hazardous waste.
 Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.
 Additional information : The given EWC-code is a guiding, and the code depends on how the waste is formed. User must evaluate the choice of correct code.
 Ecology - waste materials : Avoid release to the environment.
 European List of Waste (LoW) code : 06 02 99 - wastes not otherwise specified

SECTION 14: TRANSPORT INFORMATION

In accordance with ADR / RID / IMDG / IATA / ADN

ADR	IMDG	IATA	RID
14.1. UN number			
Not regulated for transport			
14.2. UN proper shipping name			
Not applicable	Not applicable	Not applicable	Not applicable
14.3. Transport hazard class(es)			
Not applicable	Not applicable	Not applicable	Not applicable
Not applicable	Not applicable	Not applicable	Not applicable
14.4. Packing group			
Not applicable	Not applicable	Not applicable	Not applicable
14.5. Environmental hazards			
Dangerous for the environment : No	Dangerous for the environment : No Marine pollutant : No	Dangerous for the environment : No	Dangerous for the environment : No
No supplementary information available			

14.6. Special precautions for user

Special transport precautions : No particular precautions

- Overland transport

No data available

- Transport by sea

No data available

- Air transport

No data available

Rail transport

No data available

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

IBC code : No IBC-code for bulk transport offshore (MARPOL).

SECTION 15: REGULATORY INFORMATION**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****EU-Regulations**

Contains no REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

National regulations

EC-regulation 453/2010/EC, 1907/2006/EC (REACH), 1272/2008/EC (CLP), 790/2009/EC. Transport of dangerous goods (ADR/RID, IMDG, IATA/ICAO). Workplace exposure limits

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: OTHER INFORMATION

Data sources : EC-regulation 453/2010/EC, 1907/2006/EC (REACH), 1272/2008/EC (CLP), 790/2009/EC. Transport of dangerous goods (ADR/RID, IMDG, IATA/ICAO). Workplace exposure limits.

Date of issue : 14/06/2011

Revision date : 20/01/2016

Supersedes : 07/08/2013

Version : 3.0

Signature : K. Dyreskog

The information in this safety data sheet is based on information from the manufacturer/supplier, present European and national legislation, and presupposes that the product is used within the specified area of application.