SAFETY DATA SHEET
(in accordance with Regulation (EU) 2020/878)

pH Plus

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

1.1 Product identifier.

Product Name:	pH Plus
Chemical Name:	sodium hydroxide
Index No:	011-002-00-6
CAS No:	1310-73-2
EC No:	215-185-5
Registration No:	01-2119457892-27-XXXX

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

pH regulator

Uses advised against:
Uses other than those recommended.

1.3 Details of the supplier of the safety data sheet.

Company:	**FLUIDRA COMMERCIAL, S.A.U.**
Address:	Av. Alcalde Barnils, 69
City:	08174 Sant Cugat del Vallès (Barcelona) Spain
Province:	Barcelona
Telephone:	Tel:34 93 724 39 00 Fax:34 93 724 29 93
Fax:	+34 93 713 41 11
E-mail:	fds@inquide.com
Web:	www.astralpool.com

1.4 Emergency telephone number: +34 93 724 39 00 (Only available during office hours; Monday-Friday; 08:00-18:00)
Anti poisoning centre:
ITALY (Rome): 06/305 43 43
ITALY (Milan): 02/66 10 10 29
SPAIN: +34 91 562 04 20
FRANCE (Paris): 01 40 05 48 48 FRANCE (Tolousse): 05 61 77 74 47 FRANCE (Marseille): 04 91 75 25 25
PORTUGAL: 808 250 143
BELGIQUE (Brussel): (+34) 070 245 245
CAV accreditati: Roma +39 06 68 59 3726; Foggia +39 800 18 34 59; Napoli +39 081 54 53 333; Roma +39 06 49 97 80 00; Roma +39 06 30 54 343; Firenze +39 055 79 47 819; Pavia +39 0382 24 444; Milano +39 02 66 10 10 29; Bergamo +39 800 88 33 00; Verona +39 800 01 18 58.

SECTION 2: HAZARDS IDENTIFICATION.

2.1 Classification of the substance or mixture.
In accordance with Regulation (EU) No 1272/2008:
Eye Dam. 1 : Causes serious eye damage.
Skin Corr. 1A : Causes severe skin burns and eye damage.

2.2 Label elements.
Labelling in accordance with Regulation (EU) No 1272/2008:
Pictograms:

Signal Word:
Danger
Hazard statements:

-Continued on next page.-

H314 Causes severe skin burns and eye damage.

Precautionary statements:
P101 If medical advice is needed, have product container or label at hand.
P102 Keep out of reach of children.
P280 Wear protective gloves/protective clothing/eye protection.
P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Contains:
sodium hydroxide

2.3 Other hazards.

The substance is not PBT
The substance is not vPvB
Substance does not have endocrine disrupting properties.

In normal use conditions and in its original form, the product itself does not involve any other risk for health and the environment.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS.

3.1 Substances.

Identifiers	Name	Concentrate	(*)Classification - Regulation (EC) No 1272/2008	
			Classification	Specifics concentration limits and Acute toxicity estimate
Index No: 011-002-00-6 CAS No: 1310-73-2 EC No: 215-185-5	sodium hydroxide	20 - 50 %	Skin Corr. 1A, H314	Skin Corr. 1A, H314: C ≥ 5 % Skin Corr. 1B, H314: 2 % ≤ C < 5 % Skin Irrit. 2, H315: 0,5 % ≤ C < 2 % Eye Irrit. 2, H319: 0,5 % ≤ C < 2 %

3.2 Mixtures.
Not Applicable.

SECTION 4: FIRST AID MEASURES.

4.1 Description of first aid measures.
In case of doubt or when symptoms of feeling unwell persist, get medical attention. Never administer anything orally to persons who are unconscious.

Inhalation.
Take the victim into open air; keep them warm and calm. If breathing is irregular or stops, perform artificial respiration.

Eye contact.
Wash eyes with plenty of clean and cool water for at least 10 minutes while pulling eyelids up, and seek medical assistance. Dont let the person to rub the affected eye.

Skin contact.
Remove contaminated clothing. Wash skin vigorously with water and soap or a suitable skin cleaner. NEVER use solvents or thinners. The use of personal protective equipment is recommended for people providing first aid (see section 8).

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Ingestion.
If accidentally ingested, seek immediate medical attention. Keep calm. NEVER induce vomiting.

4.2 Most important symptoms and effects, both acute and delayed.
Corrosive Product, contact with eyes or skin can cause burns; ingestion or inhalation can cause internal damage, if this occurs immediate medical assistance is required.
Contact with eyes may cause irreversible damage.

4.3 Indication of any immediate medical attention and special treatment needed.
Request immediate medical attention. Never administer anything orally to persons who are unconscious. Do not induce vomiting. If the person vomits, clear the respiratory tract. Cover the affected area with a dry sterile bandage. Protect the affected area from pressure or friction.

SECTION 5: FIREFIGHTING MEASURES.

The product is NOT classified as flammable, in case of fire the following measures should be taken:

5.1 Extinguishing media.
Suitable extinguishing media:
Extinguisher powder or CO2. In case of more serious fires, also alcohol-resistant foam and water spray.

Unsuitable extinguishing media:
Do not use a direct stream of water to extinguish. In the presence of electrical voltage, you cannot use water or foam as extinguishing media.

5.2 Special hazards arising from the substance or mixture.
Special risks.
Exposure to combustion or decomposition products can be harmful to your health.

5.3 Advice for firefighters.
Use water to cool tanks, cisterns, or containers close to the heat source or fire. Take wind direction into account. Prevent the products used to fight the fire from going into drains, sewers, or waterways.

Fire protection equipment.
According to the size of the fire, it may be necessary to use protective suits against the heat, individual breathing equipment, gloves, protective goggles or facemasks, and boots.

SECTION 6: ACCIDENTAL RELEASE MEASURES.

6.1 Personal precautions, protective equipment and emergency procedures.
For exposure control and individual protection measures, see section 8.

6.2 Environmental precautions.
Product not classified as hazardous for the environment, avoid spillage as much as possible.

6.3 Methods and material for containment and cleaning up.
Contain and collect spillage with inert absorbent material (earth, sand, vermiculite, Kieselguhr...) and clean the area immediately with a suitable decontaminant.
Deposit waste in closed and suitable containers for disposal, in compliance with local and national regulations (see section 13).

6.4 Reference to other sections.
For exposure control and individual protection measures, see section 8.
For later elimination of waste, follow the recommendations under section 13.

SECTION 7: HANDLING AND STORAGE.

7.1 Precautions for safe handling.
For personal protection, see section 8.
In the application area, smoking, eating, and drinking must be prohibited.

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Follow legislation on occupational health and safety.
Never use pressure to empty the containers. They are not pressure-resistant containers. Keep the product in containers made of a material identical to the original.

7.2 Conditions for safe storage, including any incompatibilities.
Store according to local legislation. Observe indications on the label. Store the containers between 5 and 25 º C, in a dry and well-ventilated place, far from sources of heat and direct solar light. Keep far away from ignition points. Keep away from oxidising agents and from highly acidic or alkaline materials. Do not smoke. Prevent the entry of non-authorised persons. Once the containers are open, they must be carefully closed and placed vertically to prevent spills.

The product is not affected by Directive 2012/18/EU (SEVESO III).

7.3 Specific end use(s).
None in particular.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION.

8.1 Control parameters.

Work exposure limit for:

Name	CAS No.	Country	Limit value	ppm	mg/m³
sodium hydroxide	1310-73-2	United Kingdom [1]	**Eight hours**		
			Short term		2
		Éire [2]	**Eight hours**		
			Short term		2
		Italia [3]	**Eight hours**		
			Short term		2
		United States [4] (Cal/OSHA)	**Eight hours**	(Ceiling) 2	
			Short term		
		United States [5] (NIOSH)	**Eight hours**		(Ceiling) 2
			Short term		
		United States [6] (OSHA)	**Eight hours**		2
			Short term		

[1] According Limit Value (IOELV) list in 2nd Indicative Occupational Exposure adobted by Health and Safety Executive.
[2] According Code of Practice for the Safety, Health and Welfare at Work (Chemicals Agents) Regulations adopted by Health and Safety Authority (HSA).
[3] Secondo il Decreto Legislativo del Governo n.277, 15/08/1991, il Decreto Legislativo n.66 ed il Decreto Ministeriale 26/02/2004.
[4] California Division of Occupational Safety and Health (Cal/OSHA) Permissible Exposure Limits (PELs).
[5] National Institute for Occupational Safety and Health. NIOSH Recommendations for occupational safety and health, Compendium of Policy Documents and Statements, January, 1992, DHHS (NIOSH) Publication No. 92-100.
[6] Occupational Safety and Health Administration, United States Department of Labor. Permissible Exposure limits (PELs), California Division of Occupational Safety and Health (Cal/OSHA) Permissible Exposure Limits (PELs).
The product does NOT contain substances with Biological Limit Values.
Concentration levels DNEL/DMEL:

Name	DNEL/DMEL	Type	Value
sodium hydroxide CAS No: 1310-73-2 EC No: 215-185-5	DNEL (Workers)	Inhalation, Chronic, Local effects	1 (mg/m³)
	DNEL (Consumers)	Inhalation, Chronic, Local effects	1 (mg/m³)

DNEL: Derived No Effect Level, level of exposure to the substance below which adverse effects are not anticipated.
DMEL: Derived Minimal Effect Level, exposure level corresponding to a low risk, that risk should be considered a tolerable minimum.

8.2 Exposure controls.

Measures of a technical nature:
Provide adequate ventilation, which can be achieved by using good local exhaust-ventilation and a good general exhaust system.

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Concentration:	**100 %**
Uses:	**pH regulator**
Breathing protection:	
PPE:	Filter mask for protection against gases and particles.
Characteristics:	«CE» marking, category III. The mask must have a wide field of vision and an anatomically designed form in order to be sealed and watertight.
CEN standards:	EN 136, EN 140, EN 405
Maintenance:	Should not be stored in places exposed to high temperatures and damp environments before use. Special attention should be paid to the state of the inhalation and exhalation valves in the face adaptor.
Observations:	Read carefully the manufacturer's instructions regarding the equipment's use and maintenance. Attach the necessary filters to the equipment according to the specific nature of the risk (Particles and aerosols: P1-P2-P3, Gases and vapours: A-B-E-K-AX), changing them as advised by the manufacturer.
Filter Type needed:	A2
Hand protection:	
PPE:	Non-disposable protective gloves against chemicals.
Characteristics:	«CE» marking, category III. Check the list of chemicals for which the glove has been tested.
CEN standards:	EN 374-1, En 374-2, EN 374-3, EN 420
Maintenance:	A schedule for the periodical replacement of gloves should be established in order to guarantee their replacement before pollutants permeate them. The use of contaminated gloves could be more dangerous than not using gloves, since the pollutant can gradually accumulate in the glove's material.
Observations:	They are to be replaced whenever tears, cracks or deformations are observed or when exterior dirt could reduce their strength.

Material:	PVC (polyvinyl chloride)	Breakthrough time (min.):	> 480	Material thickness (mm):	0,35

Eye protection:	
PPE:	Protective goggles with built-in frame.
Characteristics:	«CE» marking, category II. Eye protector with built-in frame for protection against dust, smoke, fog and vapour.
CEN standards:	EN 165, EN 166, EN 167, EN 168
Maintenance:	Visibility through lenses should be ideal. Therefore, these parts should be cleaned daily. Protectors should be disinfected periodically following the manufacturer's instructions.
Observations:	Some signs of wear and tear include: yellow colouring of the lenses, superficial scratching of the lenses, scraping etc.
Skin protection:	
PPE:	Chemical protective clothing
Characteristics:	«CE» marking, category III. Clothing should fit properly. The level of protection must be set according to a test parameter called BT (Breakthrough Time), which indicates how long it takes for the chemical to pass through the material.
CEN standards:	EN 464,EN 340, EN 943-1, EN 943-2, EN ISO 6529, EN ISO 6530, EN 13034
Maintenance:	In order to guarantee uniform protection, follow the washing and maintenance instructions provided by the manufacturer.
Observations:	The protective clothing's design should facilitate correct positioning, staying in place without moving for the period of use expected, bearing in mind environmental factors as well as any movement or position the user might adopt while carrying out the activity.
PPE:	Anti-static safety footwear against chemicals.
Characteristics:	«CE» marking, category III. Check the list of chemicals against which the footwear is resistant.
CEN standards:	EN ISO 13287, EN 13832-1, EN 13832-2, EN 13832-3, EN ISO 20344, EN ISO 20345
Maintenance:	For correct maintenance of this kind of safety footwear, it is necessary to observe the instructions specified by the manufacturer. The footwear should be replaced as soon as any sign of damage is observed.
Observations:	The footwear should be cleaned regularly and dried when damp, although it should not be placed too close to a source of heat in order to avoid any sharp changes in temperature.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES.

9.1 Information on basic physical and chemical properties.
Physical state: Liquid
Colour: Colourless
Odour: Characteristic (spicy)
Odour threshold: Not applicable/Not available due to the nature/properties of the product

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Melting point: Not applicable/Not available due to the nature/properties of the product
Freezing point: Not applicable/Not available due to the nature/properties of the product
Boiling point or initial boiling point and boiling range: Descompone ºC
Flammability: Not applicable/Not available due to the nature/properties of the product
Lower explosion limit: Not applicable/Not available due to the nature/properties of the product
Upper explosion limit: Not applicable/Not available due to the nature/properties of the product
Flash point: Not applicable/Not available due to the nature/properties of the product
Auto-ignition temperature: Not applicable/Not available due to the nature/properties of the product
Decomposition temperature: Not applicable/Not available due to the nature/properties of the product
pH: 13 - 14 (20ºC) (10%)
Kinematic viscosity: Not applicable/Not available due to the nature/properties of the product
Solubility: Not applicable/Not available due to the nature/properties of the product
Hydrosolubility: 100 %
Liposolubility: Alcohol y glicerol
Partition coefficient n-octanol/water (log value): Not applicable/Not available due to the nature/properties of the product
Vapour pressure: 20,594 (Estimation based on the indication of the Regulation (CE) Nº1272/2008.)
Absolute density: Not applicable/Not available due to the nature/properties of the product
Relative density: 1.26 - 1.30
Relative vapour density: Not applicable/Not available due to the nature/properties of the product
Particle characteristics: Not applicable/Not available due to the nature/properties of the product

9.2 Other information
Viscosity: Not applicable/Not available due to the nature/properties of the product
Explosive properties: Not applicable/Not available due to the nature/properties of the product
Oxidizing properties: No aplicable
Dropping point: Not applicable/Not available due to the nature/properties of the product
Blink: Not applicable/Not available due to the nature/properties of the product

SECTION 10: STABILITY AND REACTIVITY.

10.1 Reactivity.
The product does not present hazards by their reactivity.

10.2 Chemical stability.
Unstable in contact with:
- Acids.

10.3 Possibility of hazardous reactions.
Neutralization can occur on contact with acids.

10.4 Conditions to avoid.
- Avoid contact with acids.

10.5 Incompatible materials.
Avoid the following materials:
- Acids.

10.6 Hazardous decomposition products.
Depending on conditions of use, can be generated the following products:
- Corrosive vapors or gases.

SECTION 11: TOXICOLOGICAL INFORMATION.

11.1 Information on hazard classes as defined in Regulation (EC) Nº 1272/2008.
Splatters in the eyes can cause irritation and reversible damage.

Toxicological information.

Name	Acute toxicity			
	Type	Test	Kind	Value
sodium hydroxide	Oral	LD50	Rabbit	325 mg/kg bw [1]

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		[1] Naunyn-Schmiedeberg's (1937), Archiv für experimentielle|Pathologie und Pharmakologie (Berlin, Germany), 184,|587-604
	Dermal	
CAS No: 1310-73-2 EC No: 215-185-5	Inhalation	

a) acute toxicity;
Not conclusive data for classification.

b) skin corrosion/irritation;
Product classified:
Skin Corrosive, Category 1A: Causes severe skin burns and eye damage.

c) serious eye damage/irritation;
Product classified:
Serious eye damage, Category 1: Causes serious eye damage.

d) respiratory or skin sensitisation;
Not conclusive data for classification.

e) germ cell mutagenicity;
Not conclusive data for classification.

f) carcinogenicity;
Not conclusive data for classification.

g) reproductive toxicity;
Not conclusive data for classification.

h) STOT-single exposure;
Not conclusive data for classification.

i) STOT-repeated exposure;
Not conclusive data for classification.

j) aspiration hazard;
Not conclusive data for classification.

11.2 Information on other hazards.
Endocrine disrupting properties
This product does not contain components with endocrine-disrupting properties with effects on human health.
Other information
There is no information available on other adverse health effects.

SECTION 12: ECOLOGICAL INFORMATION.

12.1 Toxicity.

Name	Ecotoxicity			
	Type	Test	Kind	Value
sodium hydroxide	Fish	LC50	Fish	35-189 mg/kg (96 h)
	Aquatic invertebrates	EC50	Ceriodaphnia sp.	40.4 mg/L (48 h) [1]
		[1] Warne MSJ (1999), Ecotoxicology and Environmental Safety,|44, 196-206		
CAS No: 1310-73-2 EC No: 215-185-5	Aquatic plants			

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12.2 Persistence and degradability.
No information is available regarding the biodegradability
No information is available on the degradability
No information is available about persistence and degradability of the product.

12.3 Bioaccumulative potential.
No information is available regarding the bioaccumulation.

12.4 Mobility in soil.
No information is available about the mobility in soil.
The product must not be allowed to go into sewers or waterways.
Prevent penetration into the ground.

12.5 Results of PBT and vPvB assessment.
No information is available about the results of PBT and vPvB assessment of the product.

12.6 Endocrine disrupting properties.
This product doesn't contain components with environmental endocrine disrupting properties.

12.7 Other adverse effects.
No information is available about other adverse effects for the environment.

SECTION 13: DISPOSAL CONSIDERATIONS.

13.1 Waste treatment methods.
Do not dump into sewers or waterways. Waste and empty containers must be handled and eliminated according to current, local/national legislation.
Follow the provisions of Directive 2008/98/EC regarding waste management.

SECTION 14: TRANSPORT INFORMATION.

Transport following ADR rules for road transport, RID rules for railway, ADN for inner waterways, IMDG for sea, and ICAO/IATA for air transport.
Land: Transport by road: ADR, Transport by rail: RID.
Transport documentation: Consignment note and written instructions
Sea: Transport by ship: IMDG.
Transport documentation: Bill of lading
Air: Transport by plane: ICAO/IATA.
Transport document: Airway bill.

14.1 UN number or ID number.
UN No: UN1824

14.2 UN proper shipping name.
Description:
ADR/RID: UN 1824, SODIUM HYDROXIDE SOLUTION, 8, PG II, (E)
IMDG: UN 1824, SODIUM HYDROXIDE SOLUTION, 8, PG II
ICAO/IATA: UN 1824, SODIUM HYDROXIDE SOLUTION, 8, PG II

14.3 Transport hazard class(es).
Class(es): 8

14.4 Packing group.
Packing group: II

14.5 Environmental hazards.
Marine pollutant: No
Transport by ship, FEm – Emergency sheets (F – Fire, S - Spills): F-A,S-B

14.6 Special precautions for user.
Labels: 8

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Hazard number: 80
ADR LQ: 1 L
IMDG LQ: 1 L
ICAO LQ: 0,5 L

Provisions concerning carriage in bulk ADR: Not authorized carriage in bulk in accordance with ADR.
Proceed in accordance with point 6.
IMDG Code segregation group: 18 Alkalis

14.7 Maritime transport in bulk according to IMO instruments.
The product is not transported in bulk.

SECTION 15: REGULATORY INFORMATION.

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture.
The product is not affected by the Regulation (EC) No 1005/2009 of the European Parliament and of the Council of 16 September 2009 on substances that deplete the ozone layer.

Product classification according to Annex I of Directive 2012/18/EU (SEVESO III): N/A
The product is not affected by Regulation (EU) No 528/2012 concerning the making available on the market and use of biocidal products.
The product is not affected by the procedure established Regulation (EU) No 649/2012, concerning the export and import of dangerous chemicals.

Kind of pollutant to water (Germany): nwg: Non-hazardous to water. (Autoclassified according to the AwSV Regulations)

15.2 Chemical safety assessment.
No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

SECTION 16: OTHER INFORMATION.

Classification codes:

Eye Dam. 1 : Serious eye damage, Category 1
Skin Corr. 1A : Skin Corrosive, Category 1A

Changes regarding to the previous version:

- Modification of specific hazards (SECTION 2.3).
- Changes in the composition of the product (SECTION 3.2).
- Modification in the firefighting measures (SECTION 5.2).
- Modifications in the accidental release measures (SECTION 6.1).
- Modification in the values of the physical and chemical properties (SECTION 9).
- Change in the hazard classification (SECTION 11.1).
- Modification of the classification ADR/IMDG/ICAO/IATA/RID (SECTION 14).
- Addition of abbreviations and acronyms (SECTION 16).

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

-Continued on next page.-

Physical hazards	On basis of test data
Health hazards	Calculation method
Environmental hazards	Calculation method

It is advisable to carry out basic training with regard to health and safety at work in order to handle this product correctly.

Abbreviations and acronyms used:
ADR/RID: European Agreement concerning the International Carriage of Dangerous Goods by Road.
AwSV: Facility Regulations for handling substances that are hazardous for the water.
CEN: European Committee for Standardization.
DMEL: Derived Minimal Effect Level, exposure level corresponding to a low risk, that risk should be considered a tolerable minimum.
DNEL: Derived No Effect Level, level of exposure to the substance below which adverse effects are not anticipated.
EC50: Half maximal effective concentration.
PPE: Personal protection equipment.
IATA: International Air Transport Association.
ICAO: International Civil Aviation Organization.
IMDG: International Maritime Code for Dangerous Goods.
LC50: Lethal concentration, 50%.
LD50: Lethal dose, 50%.
RID: Regulations Concerning the International Transport of Dangerous Goods by Rail.
WGK: Water hazard classes.

Key literature references and sources for data:
http://eur-lex.europa.eu/homepage.html
http://echa.europa.eu/
Regulation (EU) 2020/878.
Regulation (EC) No 1907/2006.
Regulation (EU) No 1272/2008.

The information given in this Safety Data Sheet has been drafted in accordance with COMMISSION REGULATION (EU) 2020/878 of 18 June 2020 amending Annex II to Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemical substances and mixtures (REACH).

The information in this Safety Data Sheet on the Preparation is based on current knowledge and on current EC and national laws, as far as the working conditions of the users is beyond our knowledge and control. The product must not be used for purposes other than those that are specified without first having written instructions on how to handle. It is always the responsibility of the user to take the appropriate measures in order to comply with the requirements established by current legislation. The information contained in this Safety Sheet only states a description of the safety requirements for the preparation, and it must not be considered as a guarantee of its properties.

-End of safety data sheet.-