

Safety Data Sheet EXPO pH SPECIAL

## Safety Data Sheet dated 26/11/2018, version 1

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

1.1. Product identifier

Mixture identification:

Trade name:

EXPO pH SPECIAL

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

Acid pH regulator based on inorganic buffered acids. Liquid.

Uses advised against:

Any other use different from the identified uses.

1.3. Details of the supplier of the safety data sheet

Company:

**BARCHEMICALS SRL** 

VIA S.ALLENDE 14

CASTELNUOVO RANGONE (MO)

**ITALY** 

PHONE. +39 059/536502

FAX. +39 059/536742

www.barchemicals.it

Competent person responsible for the safety data sheet:

barani.corrado@barchemicals.it

1.4. Emergency telephone number

Barani Dr. Corrado - MOBILE PHONE. +39 335/6109383

### **SECTION 2: Hazards identification**

2.1. Classification of the substance or mixture

EC regulation criteria n°1272/2008 (CLP)



Danger, Skin Corr. 1A, Causes severe skin burns and eye damage.



Danger, Eye Dam. 1, Causes serious eye damage.

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

Hazard pictograms:



Danger

Hazard statements:

H314 Causes severe skin burns and eye damage.

Precautionary statements:

P102 Keep out of reach of children.

P280 Wear protective gloves and eye/face protection.

P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

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P303+P361+P353+P310 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. Immediately call a doctor.

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 doctor.

P501 Dispose of contents/container in accordance with applicable regulations.

**Special Provisions:** 

None

Contains

sulphuric acid ... %

Special provisions according to Annex XVII of REACH and subsequent amendments:

None

2.3. Other hazards

vPvB Substances: None - PBT Substances: None

Other Hazards:

No other hazards

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

3.1. Substances

N.A.

3.2. Mixtures

Hazardous components within the meaning of the CLP regulation and related classification:

Qty	Name	Ident. Number		Classification
>= 50% -	sulphuric acid %	Index	016-020-00-8	3.2/1 Skin Corr. 1 H314
< 60%		number:		▼ 3.2/1 3kiii Coii. 111314
		CAS:	7664-93-9	
		EC:	231-639-5	
		REACH No.:	01-21194588	
			38-20	

# **SECTION 4: First aid measures**

4.1. Description of first aid measures

In case of skin contact:

After contact with skin, wash immediately with soap and plenty of water.

Remove contaminated clothing immediatley and dispose off safely.

In case of eyes contact:

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an opthalmologist immediately.

Protect uninjured eye.

In case of Ingestion:

Rinse well your mouth

Do not under any circumstances induce vomiting. OBTAIN A MEDICAL EXAMINATION IMMEDIATELY.

In case of Inhalation:

In case of breathing difficult, bring the injured person into the open air and store it in a comfortable position for breathing. Consult a physician.

If breathing is irregular or stopped, administer artificial respiration.

Remove casualty to fresh air and keep warm and at rest.

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

After contact with the eyes produces redness and pain.

Contact with the skin produces redness, burning and pain.

In case of accidental ingestion, it can cause abdominal pain and vomiting.

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

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

Treatment:

In case of contact with eyes, rinse immediately for at least 15 minutes under running water with eyelids held open, consult an eye specialist.

Remove contaminated clothing immediately and safely. In case of skin contact wash immediately with plenty of water.

If swallowed, rinse mouth. Consult a doctor as soon as possible.

## **SECTION 5: Firefighting measures**

5.1. Extinguishing media

Suitable extinguishing media:

Water spray, heavy alcohol foam, dry chemical or carbon dioxide.

Extinguishing media which must not be used for safety reasons:

None in particular.

5.2. Special hazards arising from the substance or mixture

Do not inhale explosion and combustion gases.

Burning produces heavy smoke.

5.3. Advice for firefighters

Immediately isolate the area by removing all persons from the area of the accident in the event of a fire. No action shall be taken involving any personal risk or without proper training. Firefighters must wear protective equipment and self-contained breathing apparatus (SCBA) with a full-face mask on the working face at positive pressure. Fire extinguishers (including helmets, protective boots and gloves) conforming to European Standard EN469 will provide basic protection for chemical accidents.

#### **SECTION 6: Accidental release measures**

6.1. Personal precautions, protective equipment and emergency procedures

Evacuate the surrounding areas.

Remove persons to safety.

Prevent entry of foreign and unprotected personnel.

Do not touch or walk on spilled material.

Wear personal protection equipment.

Wear breathing apparatus if exposed to vapours/dusts/aerosols.

See protective measures under point 7 and 8.

6.2. Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains. In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

Suitable material for taking up: absorbing material, organic, sand

Retain contaminated washing water and dispose it.

6.3. Methods and material for containment and cleaning up

In case of a liquid product, hold and absorb the spillage with inert absorbent material (eg, sand, earth, vermiculite, fossil flour). Store contaminated material in suitable containers and start waste disposal. After collection, rinse the area and the materials with water by retrieving the water used and, if necessary, dispose of it in authorized plants.

6.4. Reference to other sections

See also section 8 and 13

### **SECTION 7: Handling and storage**

7.1. Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists.

Don't use empty container before they have been cleaned.

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Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.

Contamined clothing should be changed before entering eating areas.

Do not eat or drink while working.

See also section 8 for recommended protective equipment.

7.2. Conditions for safe storage, including any incompatibilities

Store at room temperature and away from direct sunlight.

Keep away from food, drink and feed.

Incompatible materials:

See the next paragraph 10.

Instructions as regards storage premises:

Adequately ventilated premises.

7.3. Specific end use(s)

See section 1.2.

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

#### 8.1. Control parameters

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**ACGIH** 

**AGS** 

sulphuric acid ... % - CAS: 7664-93-9

EU - TWA(8h): 0,05 mg/m3 - Notes: thoracic fraction

ACGIH - TWA(8h): 0.2 mg/m3 - Notes: (T), A2(M) - Pulm func

DNEL Exposure Limit Values

sulphuric acid ... % - CAS: 7664-93-9

Worker Professional: 0.05 03 - Exposure: Human Inhalation - Frequency: Long Term,

local effects

Worker Professional: 0.1 03 - Exposure: Human Inhalation - Frequency: Short Term,

local effects

**PNEC Exposure Limit Values** 

sulphuric acid ... % - CAS: 7664-93-9

Target: Fresh Water - Value: 0.0025 mg/l

Target: Marine water - Value: 0.00025 mg/l

Target: Freshwater sediments - Value: 0.002 mg/kg Target: Marine water sediments - Value: 0.002 mg/kg

Target: Microorganisms in sewage treatments - Value: 8.8 mg/l

#### 8.2. Exposure controls

#### Eye/face protection:

Eye glasses with side protection.EN166

Protective visor against liquid splashes (EN166). Recommended when there is a risk of spraying, spraying or spraying of liquid.

Protection for skin:

Clothing resistant to corrosive products CLASS I, EN 340

Protection for hands:

Gloves resistant to chemicals. EN 374

Respiratory protection:

Full face mask with filter for acids.

Thermal Hazards:

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Not applicable (the product is handled at room temperature)

Environmental exposure controls:

Do not allow the product to be absorbed from the soil or from entering waterways or sewers. Do not let product enter drains. Discharge into the environment must be avoided.

Appropriate engineering controls:

Ensure adequate ventilation. Comply with the maximum concentration values in the workplace. Predict the presence of showers and eye wash fountains at the workplace.

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## **SECTION 9: Physical and chemical properties**

9.1. Information on basic physical and chemical properties

Properties	Value	Method:	Notes:
Appearance and colour:	Liquid viscoso Colorless		
Odour:	Pungente		
Odour threshold:	Not Available		
pH:	0		
Melting point / freezing point:	-36,78°C		
Initial boiling point and boiling range:	163°C		
Flash point:	Not Available		
Evaporation rate:	Not Available		
Solid/gas flammability:	Not applicable		
Upper/lower flammability or explosive limits:	Not applicable		
Vapour pressure:	214 Pa		
Vapour density:	Not Available		
Relative density:	1.40 Kg/l		
Solubility in water:	Complete		
Solubility in oil:	Not Available		
Partition coefficient (n-octanol/water):	Not Available		
Auto-ignition temperature:	Not applicable		
Decomposition temperature:	Not Available		
Viscosity:	Not Available		
Explosive properties:	Prodotto non esplosivo		
Oxidizing properties:	Prodotto Oxidant		

#### 9.2. Other information

Properties	Value	Method:	Notes:
Miscibility:	Not Available		
Fat Solubility:	Not Available		
Conductivity:	Not Available		
Substance Groups relevant	Not Available		
properties			

# **SECTION 10: Stability and reactivity**

10.1. Reactivity

Avoid contact with fuel, moisture, heat, sparks, flames.

May be corrosive to metals.

10.2. Chemical stability

Stable under recommended storage and handling. Please refer to section 7 of the MSDS.

10.3. Possibility of hazardous reactions

No hazardous reactions when stored and handled properly.

10.4. Conditions to avoid

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Highly reactive with water and alkali.

Avoid contact with organic material.

Avoid direct sunlight.

10.5. Incompatible materials

concentrated alkali.

Organic materials that can generate combustion.

10.6. Hazardous decomposition products

Sulfur oxides.

### **SECTION 11: Toxicological information**

11.1. Information on toxicological effects

Toxicological information of the product:

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a) acute toxicity

Not classified

Based on available data, the classification criteria are not met

b) skin corrosion/irritation

The product is classified: Skin Corr. 1A H314

Test: Skin Corrosive 1 - Notes: OECD guideline 401

Test: Skin Corrosive 1 - Notes: OECD guideline 403

Test: Skin Corrosive 1 - Notes: OECD guideline 403

c) serious eye damage/irritation

The product is classified: Eye Dam. 1 H318

d) respiratory or skin sensitisation

Not classified

Based on available data, the classification criteria are not met

e) germ cell mutagenicity

Not classified

Based on available data, the classification criteria are not met

f) carcinogenicity

Not classified

Based on available data, the classification criteria are not met

g) reproductive toxicity

Not classified

Based on available data, the classification criteria are not met

h) STOT-single exposure

Not classified

Based on available data, the classification criteria are not met

i) STOT-repeated exposure

Not classified

Based on available data, the classification criteria are not met

j) aspiration hazard

Not classified

Based on available data, the classification criteria are not met

Test: Respiratory Tract Corrosive 1 - Notes: OECD guideline 403

Toxicological information of the main substances found in the product:

sulphuric acid ... % - CAS: 7664-93-9

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat = 2140 mg/kg - Source: SMYTH HF

JR,CARPENTER CP,WEIL CS,POZZANI UC,STRIEGEL JA & NYCUM JS(1969) OECD Test: LC50 - Route: Inhalation Mist - Species: Rat = 375 mg/m3 - Source: RUNKLE BK & HAHN FF (1976)

Test: LC50 - Route: Inhalation Mist - Species: Mouse = 0.85 mg/l - Duration: 4h - Source: RUNKLE BK & HAHN FF (1976)

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Test: LC50 - Route: Inhalation Mist - Species: Mouse = 0.6 mg/l - Duration: 8h - Source: RUNKLE BK & HAHN FF (1976)

e) germ cell mutagenicity:

Test: Mutagenesis - Species: Generic Bacteria Negative - Source: HERBOLD BA (1988A)

f) carcinogenicity:

Test: Carcinogenicity - Route: Oral - Species: Rat Negative

# **SECTION 12: Ecological information**

12.1. Toxicity

No information is available on the mixture as a whole. This is the information on eco-toxicological effects of the individual components.

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Not classified for environmental hazards

Based on available data, the classification criteria are not met

sulphuric acid ... % - CAS: 7664-93-9

a) Aquatic acute toxicity:

Endpoint: EC50 - Species: Algae > 100 mg/l - Duration h: 72 - Notes: OECD GUIDELINE

201

Endpoint: LC50 - Species: Fish > 16 mg/l - Duration h: 96

Endpoint: NOEC - Species: Fish = 0.31 mg/l

Endpoint: NOEC - Species: activated sludge = 26000 mg/l - Duration h: 888

12.2. Persistence and degradability

N.A.

12.3. Bioaccumulative potential

N.A.

12.4. Mobility in soil

N.A

12.5. Results of PBT and vPvB assessment

vPvB Substances: None - PBT Substances: None

12.6. Other adverse effects

None

## **SECTION 13: Disposal considerations**

13.1. Waste treatment methods

Recover, if possible. Send to authorised disposal plants or for incineration under controlled conditions. In so doing, comply with the local and national regulations currently in force.

Additional disposal information:

Retrieve if possible. Send to authorized disposal plants or incineration under controlled conditions. Work according to local and national regulations. Recover if possible. Send to authorized disposal plants or for incineration under controlled conditions. Operate according to local and national regulations.

### **SECTION 14: Transport information**



14.1. UN number

ADR-UN Number: 2796 IATA-UN Number: 2796 IMDG-UN Number: 2796

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14.2. UN proper shipping name

ADR-Shipping Name: SULPHURIC ACID with not more than 51% acid or BATTERY

FLUID, ACID(sulphuric acid ... %)

IATA-Shipping Name: SULPHURIC ACID with not more than 51% acid or BATTERY

FLUID, ACID(sulphuric acid ... %)

IMDG-Shipping Name: SULPHURIC ACID with not more than 51% acid or BATTERY

FLUID, ACID(sulphuric acid ... %)

14.3. Transport hazard class(es)

ADR-Class: 8

ADR - Hazard identification number: 80

IATA-Class: 8

IATA-Label: Corrosive

IMDG-Class: 8

14.4. Packing group

ADR-Packing Group: II IATA-Packing group: II IMDG-Packing group: II

14.5. Environmental hazards

ADR-Enviromental Pollutant: No IMDG-Marine pollutant: No

14.6. Special precautions for user

ADR-Subsidiary risks: - ADR-S.P.: -

ADR-Transport category (Tunnel restriction code): 2 (E)

IATA-Passenger Aircraft: 851
IATA-Subsidiary risks: IATA-Cargo Aircraft: 855
IATA-S.P.: IATA-ERG: 8L

IMDG-EmS: F-A , S-B

IMDG-Subsidiary risks: -

IMDG-Stowage and handling: Category B

IMDG-Segregation:

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

N.A.

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## **SECTION 15: Regulatory information**

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture Dir. 98/24/EC (Risks related to chemical agents at work)

Dir. 2000/39/EC (Occupational exposure limit values)

Regulation (EC) n. 1907/2006 (REACH) Regulation (EC) n. 1272/2008 (CLP)

Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013

Regulation (EU) 2015/830

Regulation (EU) n. 286/2011 (ATP 2 CLP) Regulation (EU) n. 618/2012 (ATP 3 CLP) Regulation (EU) n. 487/2013 (ATP 4 CLP) Regulation (EU) n. 944/2013 (ATP 5 CLP) Regulation (EU) n. 605/2014 (ATP 6 CLP) Regulation (EU) n. 2015/1221 (ATP 7 CLP)

Regulation (EU) n. 2016/918 (ATP 8 CLP)

Regulation (EU) n. 2016/1179 (ATP 9 CLP)
Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:

Restrictions related to the product:



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Restriction 3
Restrictions related to the substances contained:
No restriction.

Where applicable, refer to the following regulatory provisions:

Directive 2012/18/EU (Seveso III)

Regulation (EC) nr 648/2004 (detergents).

Dir. 2004/42/EC (VOC directive)

Provisions related to directive EU 2012/18 (Seveso III): Seveso III category according to Annex 1, part 1

None

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for the mixture. Substances for which a Chemical Safety Assessment has been carried out:

#### **SECTION 16: Other information**

### For professional use.

Full text of phrases referred to in Section 3:

H314 Causes severe skin burns and eye damage.

Hazard class and hazard category	Code	Description
Skin Corr. 1	3.2/1	Skin corrosion, Category 1
Skin Corr. 1A	3.2/1A	Skin corrosion, Category 1A
Eye Dam. 1	3.3/1	Serious eye damage, Category 1

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

Classification according to Regulation (EC) Nr. 1272/2008	Classification procedure
Skin Corr. 1A, H314	On basis of test data (pH)
Eye Dam. 1, H318	On basis of test data (pH)

This document was prepared by a competent person who has received appropriate training. Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities

SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold

Liability exclusion clause: The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This MSDS cancels and replaces any preceding release.

For professional use.

ADR: European Agreement concerning the International Carriage of

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Dangerous Goods by Road.

CAS: Chemical Abstracts Service (division of the American Chemical Society).

CLP: Classification, Labeling, Packaging.

DNEL: Derived No Effect Level.

EINECS: European Inventory of Existing Commercial Chemical Substances.

GefStoffVO: Ordinance on Hazardous Substances, Germany.

GHS: Globally Harmonized System of Classification and Labeling of

Chemicals.

IATA: International Air Transport Association.

IATA-DGR: Dangerous Goods Regulation by the "International Air Transport

Association" (IATA).

ICAO: International Civil Aviation Organization.

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization"

(ICAO).

IMDG: International Maritime Code for Dangerous Goods. INCI: International Nomenclature of Cosmetic Ingredients.

KSt: Explosion coefficient.

LC50: Lethal concentration, for 50 percent of test population.

LD50: Lethal dose, for 50 percent of test population.

PNEC: Predicted No Effect Concentration.

RID: Regulation Concerning the International Transport of Dangerous Goods

by Rail.

STEL: Short Term Exposure limit.
STOT: Specific Target Organ Toxicity.
TLV: Threshold Limiting Value.
TWA: Time-weighted average
WGK: German Water Hazard Class.