





Safety Data Sheet dated 19/7/2017, version 3

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

- 1.1. Product identifier
Mixture identification:
Trade name: EXPO pH NEW BLU
- 1.2. Relevant identified uses of the substance or mixture and uses advised against
Identified use:
Acid pH regulator based on inorganic buffered acids. With algic and azure effect.
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
- 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.
P260 Do not breathe dust/fume/gas/mist/vapours/spray.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

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P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ 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.

Special Provisions:

None

Contains

sulphuric acid ... %
sodium hydrogensulphate

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
>= 40% - < 50%	sulphuric acid ... %	Index 016-020-00-8 number: CAS: 7664-93-9 EC: 231-639-5 REACH No.: 01- 2119458838- 20	 3.2/1A Skin Corr. 1A H314
>= 7% - < 10%	sodium hydrogensulphate	Index 016-046-00-X number: CAS: 7681-38-1 EC: 231-665-7 REACH No.: 01- 2119552465- 36	 3.3/1 Eye Dam. 1 H318

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Remove contaminated clothing immediately and dispose off safely.

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

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 ophthalmologist immediately.

Protect uninjured eye.

In case of Ingestion:

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

In case of Inhalation:

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

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- 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.
- 4.2. Most important symptoms and effects, both acute and delayed
Contact with the skin produces redness, burning and pain.
Contact with the eyes produces redness, pain, severe deep burns and loss of vision.
Ingestion causes severe irritation or chemical burns in the mouth, throat, esophagus and stomach.
- 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.
In case of inhalation of fumes move the person from the contaminated area; if breathing is irregular or stops, administer artificial respiration. Consult a doctor as soon as possible.
If swallowed, do not induce vomiting.

SECTION 5: Firefighting measures

- 5.1. Extinguishing media
Suitable extinguishing media:
Carbon dioxide (CO₂).
CO₂ or Dry chemical fire extinguisher.
Extinguishing media which must not be used for safety reasons:
Water.
- 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
Use suitable breathing apparatus .
Move undamaged containers from immediate hazard area if it can be done safely.

SECTION 6: Accidental release measures

- 6.1. Personal precautions, protective equipment and emergency procedures
Wear personal protection equipment.
- 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
- 6.3. Methods and material for containment and cleaning up
Collect spills with non-combustible material, absorbent material, sand, earth, vermiculite and dispose of the product according to the regulations in force.
- 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.
Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.
Contaminated 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 in airtight containers in a dry and well-ventilated place.

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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

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
sodium hydrogensulphate - CAS: 7681-38-1
Target: Fresh Water - Value: 11.09 mg/l
Target: Marine water - Value: 1.109 mg/l
Target: Freshwater sediments - Value: 40.2 mg/kg
Target: Marine water sediments - Value: 4.02 mg/kg
Target: Soil (agricultural) - Value: 1.54 mg/kg
Target: Occasional issue. - Value: 17.66 mg/l

8.2. Exposure controls

Eye/face protection:

Eye glasses with side protection. EN166

Protection for skin:

Clothing resistant to corrosive products CLASS I, EN 340

Protection for hands:

Gloves resistant to chemicals. EN 374
CR (polychloroprene, chloroprene rubber).

Respiratory protection:

Full face mask with filter for acids.

Thermal Hazards:

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:

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

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

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Properties	Value	Method:	Notes:
Appearance and colour:	Liquid Clear Blue	--	--
Odour:	Odorless	--	--
Odour threshold:	Not Available	--	--
pH:	0	--	20 °C
Melting point / freezing point:	Not Relevant	--	--
Initial boiling point and boiling range:	Not Relevant	--	--
Flash point:	N.A.	--	Inorganic blend. Not inflammable.
Evaporation rate:	Not Available	--	--
Solid/gas flammability:	N.A.	--	--
Upper/lower flammability or explosive limits:	N.A.	--	--
Vapour pressure:	Not Relevant	--	--
Vapour density:	Not Relevant	--	--
Relative density:	1.40 Kg/l	--	20 °C
Solubility in water:	Complete	--	--
Solubility in oil:	Not Relevant	--	--
Partition coefficient (n-octanol/water):	N.A.	--	--
Auto-ignition temperature:	Not Available	--	--
Decomposition temperature:	Not Available	--	--
Viscosity:	Not Relevant	--	--
Explosive properties:	N.A.	--	--
Oxidizing properties:	N.A.	--	--

9.2. Other information

Properties	Value	Method:	Notes:
Miscibility:	Complete	--	--
Fat Solubility:	Not Relevant	--	--
Conductivity:	Not Relevant	--	--
Substance Groups relevant properties	Not Relevant	--	--

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is not pyrophoric.

10.2. Chemical stability

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

10.3. Possibility of hazardous reactions

In the presence of chlorine-containing products.

In presence of metals.

10.4. Conditions to avoid

Avoid direct sunlight.

10.5. Incompatible materials

Oxidizing agents.

concentrated alkali.

Products containing chlorine.

10.6. Hazardous decomposition products

Sulfur oxides.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological information of the product:

N.A.

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)

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)

sodium hydrogensulphate - CAS: 7681-38-1

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat = 2140 mg/kg - Notes: Acido solforico

Test: LD50 - Route: Oral - Species: Rat > 2000 mg/kg - Source: OECD 423 - Notes: Solfato di sodio

Test: LC50 - Route: Inhalation - Species: Rat > 2.4 mg/l - Duration: 4h - Source: OECD 436 - Notes: Solfato di sodio

If not differently specified, the information required in Regulation (EU)2015/830 listed below must be considered as N.A.:

- a) acute toxicity;
- b) skin corrosion/irritation;
- c) serious eye damage/irritation;
- d) respiratory or skin sensitisation;
- e) germ cell mutagenicity;
- f) carcinogenicity;
- g) reproductive toxicity;
- h) STOT-single exposure;
- i) STOT-repeated exposure;
- j) aspiration hazard.

SECTION 12: Ecological information

12.1. Toxicity

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

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

sodium hydrogensulphate - CAS: 7681-38-1

a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish = 7960 mg/l - Duration h: 96 - Notes: EPA 600/4-90/027, solfato di sodio, read-across

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Endpoint: LC50 - Species: Daphnia = 1766 mg/l - Duration h: 48 - Notes: EPA 600/R-94/024, solfato di sodio read-across

Endpoint: EC50 - Species: Algae = 1900 mg/l - Duration h: 120 - Notes: solfato di sodio, read-across

b) Aquatic chronic toxicity:

Endpoint: NOEC - Species: Daphnia = 1109 mg/l - Notes: ASTM E 1295-01, solfato di sodio, read-across

d) Terrestrial toxicity:

Endpoint: LC50 - Species: Hyalella Azteca = 757 mg/l - Duration h: 96 - Notes: solfato di sodio, read-across

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.

SECTION 14: Transport information



14.1. UN number

ADR-UN Number: 3264

IATA-UN Number: 3264

IMDG-UN Number: 3264

14.2. UN proper shipping name

ADR-Shipping Name: CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.(sulphuric acid ... %)

IATA-Shipping Name: CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.(sulphuric acid ... %)

IMDG-Shipping Name: CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.(sulphuric acid ... %)

14.3. Transport hazard class(es)

ADR-Class: 8

ADR - Hazard identification number: 88

IATA-Class: 8

IATA-Label: 8

IMDG-Class: 8

14.4. Packing group

ADR-Packing Group: II

IATA-Packing group: II

IMDG-Packing group: II

14.5. Environmental hazards

ADR-Environmental Pollutant: No

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- IMDG-Marine pollutant: No
- 14.6. Special precautions for user
- ADR-Subsidiary risks: -
- ADR-S.P.: 274
- ADR-Transport category (Tunnel restriction code): (E)
- IATA-Passenger Aircraft: 850
- IATA-Subsidiary risks: -
- IATA-Cargo Aircraft: 854
- IATA-S.P.: A3 A803
- IATA-ERG: 8L
- IMDG-EmS: F-A , S-B
- IMDG-Subsidiary risks: -
- IMDG-Stowage and handling: Category B
- IMDG-Segregation: Clear of living quarters.
- 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code
N.A.

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)

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:

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:

None

SECTION 16: Other information

For professional use.

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Full text of phrases referred to in Section 3:

H314 Causes severe skin burns and eye damage.

H318 Causes serious eye damage.

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

Paragraphs modified from the previous revision:

SECTION 1: Identification of the substance/mixture and of the company/undertaking
 SECTION 2: Hazards identification
 SECTION 3: Composition/information on ingredients
 SECTION 4: First aid measures
 SECTION 5: Firefighting measures
 SECTION 6: Accidental release measures
 SECTION 7: Handling and storage
 SECTION 8: Exposure controls/personal protection
 SECTION 9: Physical and chemical properties
 SECTION 15: Regulatory information

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

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 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.

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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.