

MATERIAL SAFETY DATASHEET

According to EG Nr. 1907/2006

Version 5, Revision date 19-Oct-18

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GENERIC MSDS - NO COUNTRY SPECIFIC DATA - NO OEL DATA

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

1.1 Product identifiers

Product Name : Concentrated buffer for PQ
Product number : 250.1064
Supplier : Antec Scientific
REACH number : A registration number is not available for this substance as the substance or its uses are exempted from registration, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.

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

Identified use : Test solution for calibration

1.3 Details of the supplier of the safety data sheet

Company : Antec Scientific
Industrieweg 12
2382NV Zoeterwoude
The Netherlands
Telephone : +31 71-5813333
Email : info@AntecScientific.com

1.4 Emergency telephone number

Emergency # : 112 (Alarm number)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

H314 Causes severe skin burns and eye damage

H318 Causes serious eye damage

For the full text of the H-Statements mentioned in this Section, see Section 16

2.2 Label elements

Labelling according Regulation (EC) No 1272/2008

Pictogram



GH05
Warning

Signal word

Hazard statements:

H314 Causes severe skin burns and eye damage
H318 Causes serious eye damage

Precautionary statement(s):

P260 - Do not breathe mist, vapors, spray
P264 - Wash exposed skin thoroughly after handling
P280 - Wear protective gloves, eye protection
P301 + P330 + P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting
P303 + P361 + P353 - IF ON SKIN (or hair): Remove/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
P310 - Immediately call a poison center or doctor/physician If inhaled: Remove person to fresh air and keep comfortable for breathing
P363 - Wash contaminated clothing before reuse
P405 - Store locked up
P501 - Dispose of contents/container to comply with local, state and federal regulations

Supplemental Hazard Statements

none

2.3 Other hazards

This substance/mixture contains no components considered to be persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients**3.2 Mixtures**

Component	Classification	Concentration
EDTA		
CAS-No. 6381-92-6 EG-No. 613-386-6	Acute Tox. 4 (Oral), H302; Skin Irrit. 2, H315; Eye Irrit. 2A, H319; STOT SE 3, H335	<1%
Acetic acid ACS		
CAS-No. 64-19-7 EG-No. 200-580-7 Indexno. 607-002-00-6	Flam. Liq. 3; Skin Corr. 1A; H226, H314 Concentration limits: >= 90 %: Skin Corr. 1A, H314; 25 - < 90 %: Skin Corr. 1B, H314; 10 - < 25 %: Skin Irrit. 2, H315; 10 - < 25 %: Eye Irrit. 2, H319;	5-15%
Potassium Chloride		
CAS-No. 7447-40-7 EG-No. 231-211-8	None	<1%

For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: First aid measures**4.1 Description of first aid measures****General advice**

Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

Immediately flush eyes with plenty of water for at least 15 minutes. Consult a physician.

If swallowed

Wash out mouth with water provided the person is conscious, do not induce vomiting. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11.

4.3 Indication of any immediate medical attention and special treatment needed**Notes to Physician**

No data available

SECTION 5: Firefighting measures**5.1 Extinguishing media****Suitable extinguishing media**

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture

Mixture with combustible ingredients. Development of hazardous combustion gases or vapours possible in the event of fire. Fire may cause evolution of acetic acid vapours

5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

5.4 Further information

No data available

SECTION 6: Accidental release measures**6.1 Personal precautions, protective equipment and emergency procedures**

Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas. For personal protection see section 8.

6.2 Environmental precautions

Prevent entry into waterways, sewers, basements or confined areas.

6.3 Methods and materials for containment and cleaning up

Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers.

6.4 Reference to other sections

For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Take off contaminated clothing and wash before reuse. In case of insufficient ventilation, wear suitable respiratory equipment. Use only with adequate ventilation and in closed systems. Do not eat, drink or smoke when using this product.

7.2 Conditions for safe storage, including any incompatibilities

Store in a cool and dry place. Keep container tightly closed in a dry and well-ventilated place. Keep away from direct sunlight and sources of ignition. Keep this product away from strong oxidizers, metals and strong bases.

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Component	EU	ACGIH TLV	OSHA PEL	NIOSH IDLH
Acetic Acid ACS CAS-no: 64-19-7	TWA: 25 mg/m ³	TWA: 15 mg/m ³	TWA: 25 mg/m ³	TWA: 25 mg/m ³

Other Exposure Guidelines

No other data available.

8.2 Exposure controls

Appropriate engineering controls

Use general industrial hygiene practice.

Personal protective equipment

Eye/face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Body Protection

Impervious long sleeved clothing, the type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Respiratory protection is not required. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product. Take off contaminated clothing and wash before reuse. For environmental protection, remove and wash all contaminated protective equipment before re-use.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

a) Appearance Form:	Liquid
Colour:	Colourless
b) Odour:	Vinegar odour
c) Odour threshold:	No data available
d) pH:	Apr. 4.5 at 20 °C
e) Melting point/freezing point:	No data available
f) Initial boiling point and boiling range:	No data available
g) Flash point:	No data available
h) Evaporation rate:	No data available
i) Flammability (solid, gas):	Non flammable
j) Upper/lower flammability or explosive limits:	No data available
k) Vapour pressure:	No data available
l) Vapour density:	No data available
m) Relative density:	1.01 g/cm ³ at 20 °C
n) Water solubility:	No data available
o) Partition coefficient noctanol/water:	No data available
p) Auto-ignition temperature:	No data available
q) Decomposition temperature:	No data available
r) Viscosity:	No data available
s) Explosive properties:	No data available
t) Oxidizing properties:	None

9.2 Other safety information

No data available

SECTION 10: Stability and reactivity

10.1 Reactivity

Thermal decomposition generates corrosive vapours

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

Not established.

10.4 Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

10.5 Incompatible materials

Strong oxidizers, metals, strong bases.

10.6 Hazardous decomposition products

Nitrogen oxides, Carbon monoxide, Carbon dioxide and corrosive vapours.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute oral toxicity

Symptoms: Irritations of mucous membranes in the mouth, pharynx, oesophagus and gastrointestinal tract.

Acute inhalation toxicity

Symptoms: mucosal irritations, Cough, Shortness of breath

Acute dermal toxicity

This information is not available.

Skin irritation

Mixture causes serious skin burns and eye damage.

Eye irritation

Risk of corneal clouding. Mixture causes serious eye damage.

Sensitisation

This information is not available.

Germ cell mutagenicity

This information is not available.

Carcinogenicity

This information is not available.

Reproductive toxicity

This information is not available.

Teratogenicity

This information is not available.

Specific target organ toxicity - single exposure

This information is not available.

Specific target organ toxicity - repeated exposure

This information is not available.

Aspiration hazard

This information is not available.

Additional Information

After uptake of large quantities:

Systemic effects: gastric spasms, shock, bronchitis, acidosis, Circulatory collapse, Pneumonia

Absorption of large quantities may result in damage of the following: Kidney

Handle in accordance with good industrial hygiene and safety practice.

SECTION 12: Ecological information**12.1 Toxicity**

Chemical name	Algae	Fish	Micro-organisms	Daphnia Magna (Water Flea)
EDTA CAS-No. 6381-92-6		>=500 mg/l		
Chemical name	Algae	Fish	Micro-organisms	Daphnia Magna (Water Flea)
Acetic acid ACS CAS-no: 64-19-7	16h IC5 = 4000 mg/l; Scenedesmus quadricauda (Green algae)	96h LC50: = 75 mg/l Lepomis macrochirus (Bluegill sunfish)	16h EC5 = 2850 mg/l; Pseudomonas putida, 15min EC5 = 11 mg/l; Photobacterium phosphoreum	72h EC5 = 78 mg/l; E.sulcatum, 24h EC5 = 47 mg/l; Daphnia magna

12.2 Persistence and degradability*Biodegradability*

Readily biodegradable in water. Biodegradable in the soil. Highly mobile in soil

Biochemical Oxygen Demand (BOD)

0.6-0.74 g/g (Lit.)

Chemical Oxygen Demand (COD)

1.03 g/g

ThOD

1.07 g/g

12.3 Bioaccumulative potential

Low potential for bioaccumulation (Log Kow < 4).

12.4 Mobility in soil

May be harmful to plant growth, blooming and fruit formation.

12.5 Results of PBT and vPvB assessment

This mixture contains no components considered to be persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Other adverse effects

No data available

SECTION 13: Disposal considerations**13.1 Waste treatment methods****Product**

Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging

Dispose of as unused product.

SECTION 14: Transport information**14.1 UN number**

ADR/RID: UN2790

IMDG: UN2790

IATA: UN2790

14.2 UN proper shipping name

ACETIC ACID SOLUTION, with more than 10 percent and less than 50 percent acid, by mass

14.3 Transport hazard class(es)

ADR/RID: 8

IMDG: 8

IATA: 8

14.4 Packaging group

ADR/RID: III

IMDG: III

IATA: III

14.5 Environmental hazards

ADR/RID: no

IMDG Marine pollutant: no

IATA: no

14.6 Special precautions for user

No data available

SECTION 15: Regulatory information**15.1 Safety, health and environmental regulations/legislation specific for the mixture**

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

This product does not contain substances subject to authorization (Regulation (EC) No. 1907/2006 (REACH), Annex XIV). This product does not contain substances subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII).

15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out

SECTION 16: Other information

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

H226	Flammable liquid and vapour.
H302	Harmful if swallowed
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H318	Causes serious eye damage
H319	Causes serious eye irritation.
H335	May cause respiratory irritation

Legend

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA TWA (time-weighted average)

16.1 Changes with previous revision

The layout is changed and confirmed according to EG Nr. 1907/2006.

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