





#### Safety Data Sheet dated 25/3/2016, version 4

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

1.1. Product identifier

Mixture identification:

Trade name:

BAR-O-DUE AG+

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

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

Antipoison Center - Hospital Name 2 - City - Telephone nbr. (availability information)

Antipoison Center - Hospital Name 3 - City - Telephone nbr. (availability information)

Antipoison Center - Hospital Name 4 - City - Telephone nbr. (availability information)

Antipoison Center - Hospital Name 5 - City - Telephone nbr. (availability information)

Antipoison Center - Hospital Name 6 - City - Telephone nbr.(availability information)

Antipoison Center - Hospital Name 7 - City - Telephone nbr. (availability information)

Antipoison Center - Hospital Name 8 - City - Telephone nbr. (availability information)

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

2.1. Classification of the substance or mixture

EC regulation criteria n°1272/2008 (CLP)

- Warning, Acute Tox. 4, Harmful if swallowed.
- A Danger, Eye Dam. 1, Causes serious eye damage.
- Aquatic Chronic 2, Toxic to aquatic life with long lasting effects.

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

Hazard pictograms:







Danger
Hazard statements:

H302 Harmful if swallowed.

H318 Causes serious eye damage.

H411 Toxic to aquatic life with long lasting effects.

Precautionary statements:

P264 Wash ... Thoroughly after handling.

P270 Do no eat, drink or smoke when using this product.

P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor/if you feel unwell.

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/doctor/...

P330 Rinse mouth.

P391 Collect spillage.

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

**Special Provisions:** 

None

Contents

hydrogen peroxide solution ... %

1,2-Ethanediamine,N,N,N',N'-tetramethyl-polymer with 1,1'-oxybis(2-chloroethane)

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
>= 30% - < 40%	hydrogen peroxide solution %	number: CAS: EC: REACH No.:	7722-84-1 231-765-0	© 2.13/1 Ox. Liq. 1 H271 © 3.2/1A Skin Corr. 1A H314 © 3.1/4/Oral Acute Tox. 4 H302 © 3.1/4/Inhal Acute Tox. 4 H332
>= 3% - < 5%	1,2- Ethanediamine,N,N,N', N'-tetramethyl-polymer with 1,1'-oxybis(2- chloroethane)	CAS:	31075-24-8	3.1/4/Inhal Acute Tox. 4 H332 3.1/4/Oral Acute Tox. 4 H302 4.1/A1 Aquatic Acute 1 H400 4.1/C1 Aquatic Chronic 1 H410
<0.1%	Silver	CAS: 7440-22	?-4	Not classified

#### **SECTION 4: First aid measures**

#### 4.1. Description of first aid measures

In case of skin contact:

Immediately take off all contaminated clothing.

Areas of the body that have - or are only even suspected of having - come into contact with the product must be rinsed immediately with plenty of running water and possibly with soap. OBTAIN IMMEDIATE MEDICAL ATTENTION.

Wash thoroughly the body (shower or bath).

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 opthalmologist immediately.

Protect uninjured eye.

In case of Ingestion:

Give nothing to eat or drink.

In case of Inhalation:

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

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

None

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:

None

#### **SECTION 5: Firefighting measures**

5.1. Extinguishing media

Suitable extinguishing media:

Water.

Carbon dioxide (CO2).

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

Use suitable breathing apparatus.

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

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.

Remove all sources of ignition.

Remove persons to safety.

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.

Retain contaminated washing water and dispose it.

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

Wash with plenty of water.

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.

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

Keep away from food, drink and feed.

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Adequately ventilated premises.

7.3. Specific end use(s)

None in particular

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

8.1. Control parameters

hydrogen peroxide solution ... % - CAS: 7722-84-1

ACGIH - LTE(8h): 1 ppm - Notes: A3 - Eye, URT, and skin irr

**DNEL Exposure Limit Values** 

hydrogen peroxide solution ... % - CAS: 7722-84-1

Worker Professional: 1.4 03 - Consumer: 0.21 03 - Exposure: Human Inhalation - Frequency: Long Term, local effects - Endpoint: Irritation (respiratory tract)
Worker Professional: 3 03 - Consumer: 1.93 03 - Exposure: Human Inhalation -

Frequency: Short Term, local effects - Endpoint: Irritation (respiratory tract)

PNEC Exposure Limit Values

hydrogen peroxide solution ... % - CAS: 7722-84-1

Target: Fresh Water - Value: 0.0126 mg/l Target: Marine water - Value: 0.0126 mg/l

Target: Microorganisms in sewage treatments - Value: 4.66 mg/l

Target: Freshwater sediments - Value: 0.047 mg/kg Target: Marine water sediments - Value: 0.047 mg/kg

8.2. Exposure controls

Eye/face protection:

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:

None
Environmental exposure controls:
None
Appropriate engineering controls:
None

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

9.1. Information on basic physical and chemical properties

Properties	Value	Method:	Notes:
Appearance and colour:	Liquido giallo chiaro		
Odour:	Inodore		
Odour threshold:	N.A.		
pH:	2.5		
Melting point / freezing point:	N.A.		
Initial boiling point and boiling range:	N.A.		
Flash point:	N.A.		
Evaporation rate:	N.A.		
Solid/gas flammability:	Prodotto non infiammabile		
Upper/lower flammability or explosive limits:	N.A.		
Vapour pressure:	N.A.		
Vapour density:	N.A.		
Relative density:	1.14 Kg/l		
Solubility in water:	Completa		
Solubility in oil:	N.A.		
Partition coefficient (n-octanol/water):	N.A.		
Auto-ignition temperature:	N.A.		
Decomposition	N.A.		
temperature:			
Viscosity:	N.A.		
Explosive properties:	N.A.		
Oxidizing properties:	Prodotto non ossidante		

#### 9.2. Other information

Properties	Value	Method:	Notes:	
Miscibility:	N.A.			
Fat Solubility:	N.A.			
Conductivity:	N.A.			
Substance Groups	N.A.			
relevant properties				

#### **SECTION 10: Stability and reactivity**

10.1. Reactivity

Stable under normal conditions

10.2. Chemical stability

Stable under normal conditions

10.3. Possibility of hazardous reactions

None

10.4. Conditions to avoid

Stable under normal conditions.

10.5. Incompatible materials

concentrated alkali.

Products containing chlorine.

organic substances.

10.6. Hazardous decomposition products

Oxygen

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

11.1. Information on toxicological effects

Toxicological information of the mixture:

N.A.

Toxicological information of the main substances found in the mixture:

hydrogen peroxide solution ... % - CAS: 7722-84-1

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat = 800 mg/kg - Source: STUDY REPORT 1981 (ECHA) - Notes: OECD GUIDELINE 401 (ACUTE ORAL TOXICITY)

Test: LC50 - Route: Inhalation - Species: Rat > 0.17 mg/l - Duration: 4h - Notes: LINEE GUIDA 403 PER IL TEST DELL'OECD

Test: LD50 - Route: Skin - Species: Rabbit > 2000 mg/kg - Source: STUDY REPORT 1983 (ECHA) - Notes: US EPA GUIDELINES FOR ACUTE DERMAL TOXICITY

b) skin corrosion/irritation:

Test: Skin Corrosive - Route: Skin - Species: Rabbit Yes - Source: STUDY REPORT 1990 (ECHA) - Notes: OECD GUIDELINE 404 (ACUTE DERMAL IRRITATION / CORROSION)

c) serious eye damage/irritation:

Test: Eye Corrosive - Species: Rabbit Yes - Source: STUDY REPORT 1985 (ECHA) - Notes: OECD GUIDELINE 405 (ACUTE EYE IRRITATION / CORROSION)

d) respiratory or skin sensitisation:

Test: Skin Sensitization - Species: .porc No - Source: STUDY REPORT 1953 (ECHA) - Notes: SKIN SENSITIZATION TEST

h) STOT-single exposure:

Test: Respiratory Tract Irritant Yes - Source: ECHA

- 1,2-Ethanediamine,N,N,N',N'-tetramethyl-polymer with 1,1'-oxybis(2-chloroethane) CAS: 31075-24-8
- a) acute toxicity:

Test: LC50 - Route: Inhalation Dust - Species: Rat = 2.9 mg/l - Duration: 4h

Test: LD50 - Route: Skin - Species: Rabbit > 2000 mg/kg

Test: LD50 - Route: Oral - Species: Rat = 1951 mg/kg

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.

hydrogen peroxide solution ... % - CAS: 7722-84-1

a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish = 16.4 mg/l - Duration h: 96 - Notes: ECHA Endpoint: LC50 - Species: Daphnia = 2.4 mg/l - Duration h: 48 - Notes: ECHA Endpoint: EC50 - Species: Algae = 1.38 mg/l - Duration h: 72 - Notes: ECHA

b) Aquatic chronic toxicity:

Endpoint: NOEC - Species: aquatic invertebrates = 0.63 mg/l - Duration h: 504 - Notes: ECHA

Endpoint: EC50 - Species: activated sludge = 466 mg/l - Duration h: 0.5 - Notes: ECHA 1,2-Ethanediamine,N,N,N',N'-tetramethyl-polymer with 1,1'-oxybis(2-chloroethane) - CAS: 31075-24-8

a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish = 13 mg/l - Duration h: 96 Endpoint: EC50 - Species: Daphnia = 0.37 mg/l - Duration h: 48 Endpoint: NOEC - Species: Fish = 7.8 mg/l

Endpoint: NOEC - Species: Algae = 0.0019 mg/l - Duration h: 120 Endpoint: NOEC - Species: Daphnia = 0.08 mg/l - Duration h: 48

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: 2014 IATA-UN Number: 2014 IMDG-UN Number: 2014

14.2. UN proper shipping name ADR-Shipping Name:

HYDROGEN PEROXIDE, AQUEOUS SOLUTION with not less than 20% but not more than 60% hydrogen peroxide (stabilized as necessary)

HYDROGEN PEROXIDE, AQUEOUS SOLUTION with not IATA-Shipping Name:

less than 20% but not more than 60% hydrogen peroxide

(stabilized as necessary)

HYDROGEN PEROXIDE, AQUEOUS SOLUTION with not IMDG-Shipping Name:

less than 20% but not more than 60% hydrogen peroxide

(stabilized as necessary)

14.3. Transport hazard class(es)

ADR-Class: 5.1 ADR - Hazard identification number: 58 IATA-Class: 5.1 IATA-Label: 5.1 + 8IMDG-Class: 5.1

14.4. Packing group

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

14.5. Environmental hazards

ADR-Environmental Pollutant: Yes

IMDG-Marine pollutant: Marine Pollutant

14.6. Special precautions for user

ADR-Subsidiary risks: 6.1 ADR-S.P.: N/A ADR-Tunnel Restriction Code: (E) IATA-Passenger Aircraft: 550 IATA-Subsidiary risks: 6.1 IATA-Cargo Aircraft: 554 IATA-S.P.: IATA-ERG: 5C , S-Q IMDG-EmS: F-H

IMDG-Subsidiary risks: 6.1

IMDG-Storage category:

Category D

IMDG-Storage notes: Shaded from radiant heat. "Separated from" permanganates

and class 4.1. See 7.2.1.13.1.2.

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)

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 2003/105/CE ('Activities linked to risks of serious accidents') and subsequent amendments.

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

1999/13/EC (VOC directive)

15.2. Chemical safety assessment

No

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

#### For professional use

Full text of phrases referred to in Section 3:

H271 May cause fire or explosion; strong oxidiser.

H314 Causes severe skin burns and eye damage.

H302 Harmful if swallowed.

H332 Harmful if inhaled.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

Paragraphs modified from the previous revision: 1, 3.

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.

LTE: Long-term exposure.

PNEC: Predicted No Effect Concentration.

RID: Regulation Concerning the International Transport of Dangerous Goods

by Rail.

STE: Short-term exposure.

STEL: Short Term Exposure limit.

STOT: Specific Target Organ Toxicity.

TLV: Threshold Limiting Value.

TLV: Threshold Limiting Value.
TWATLV: Threshold Limit Value for the Time Weighted Average 8 hour day.

(ACGIH Standard).

WGK: German Water Hazard Class.