Safety data sheet

Revision: 31-07-2012
Replaces: 07-11-2011
Version: 02.01/GBR

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

1.1. Product identifier

Trade name: Serum 1000

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

Recommended uses: Extremely powerful cleaner formulated to remove heavy organic/biological contamination like mould in buildings and structures, cleaning after water and sewage damages, dead body clean up, crime scene cleaning, odour removal due to body decomposition and similar.

1.3. Details of the supplier of the safety data sheet

Supplier: NAC europe ApS
Ellegårdvej 18
6400 Sønderborg
Denmark
Tel: +45 74 42 62 92
Fax: +45 74 42 47 86
Email: info@nac-europe.com

1.4. Emergency telephone number

0870 600 6266 (UK only) Only available to health professionals.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

DPD-classification: Xn;R22 Xi;R41

CLP-classification: Eye Dam. 1;H318 Acute tox. 4; H302

Please see section 16 for the full text of R-phrases and H-phrases.

Most serious harmful effects: Causes serious eye damage. Harmful if swallowed.

2.2. Label elements

Signal word: Danger

Contains: Hydrogen peroxide solution 10-25%

H-phrases: Causes serious eye damage.
Harmful if swallowed.

P-phrases: Wear eye protection/face protection.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Immediately call a POISON CENTER or doctor/physician.

2.3. Other hazards

Assessment to determine PBT and vPvB has not been made.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Registration number	CAS/ EC Number	Substance	DSD-classification/ CLP-classification	w/w%	Note
.	7722-84-1	Hydrogen peroxide solution	R5 O;R8 Xn;R20/22 C;R35	10-25	.
.	231-765-0	.	Ox. Liq. 1;H271 Acute Tox. 4;H332	.	.
.	.	.	Acute Tox. 4;H302 Skin Corr. 1A;H314	.	.
.	64-19-7	Acetic acid	R10 C;R35	0,1-1	.
.	200-580-7	.	Flam. Liq. 3;H226 Skin Corr. 1A;H314	.	.

Please see section 16 for the full text of R-phrases and H-phrases.

Other information: Pursuant to Regulation (EC) No. 648/2004 on detergents. less than 5% non-ionic surfactants 15% or over but less than 30% oxygen-based bleaching agents

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation: Seek fresh air. Seek medical advice in case of persistent discomfort.

Ingestion: Wash out mouth thoroughly and drink 1-2 glasses of water in small sips. Seek medical advice in case of persistent discomfort.

Skin: Remove contaminated clothing. Wash the skin with water. Seek medical advice in case of persistent discomfort.

Eyes: Open eye wide, remove any contact lenses and flush immediately with water (preferably using eye wash equipment). Seek medical advice immediately. Continue flushing until medical attention is obtained.

Other information: When obtaining medical advice, show the safety data sheet or label.

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

Harmful if swallowed. Eye contact may result in deep caustic burns, pain, tearing and cramping of the eyelids. Risk of serious eye injury and loss of sight. May irritate the skin – may cause reddening. Inhalation of spray mist may cause irritation to the upper airways.

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

No special immediate treatment required.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media: Extinguish with powder, foam, carbon dioxide or water mist. Use water or water mist to cool non-ignited stock.

Unsuitable extinguishing media: Do not use water stream, as it may spread the fire.

5.2. Special hazards arising from the substance or mixture

The product is not directly flammable. Avoid inhalation of vapour and fumes – seek fresh air.

5.3. Advice for firefighters

Move containers from danger area if it can be done without risk. Avoid inhalation of vapour and flue gases – seek fresh air. If there is a risk of exposure to vapour and flue gases, a self-contained breathing apparatus must be worn.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel: Stay upwind/keep distance from source. Wear gloves. Wear safety goggles/face protection. In case of insufficient ventilation, wear respiratory protective equipment.

For emergency responders: In addition to the above: Protective suit equivalent to EN 368, type 3, is recommended.

6.2. Environmental precautions

Prevent spillage from entering drains and/or surface water.

6.3. Methods and material for containment and cleaning up

Contain and absorb spill with sand or other absorbent material and transfer to suitable waste containers. Wipe up minor spills with a cloth.

6.4. Reference to other sections

See section 8 for type of protective equipment. See section 13 for instructions on disposal.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Work under effective process ventilation (e.g. local exhaust ventilation). Running water and eye wash equipment must be available. Wash hands before breaks, before using restroom facilities, and at the end of work.

7.2. Conditions for safe storage, including any incompatibilities

Store safely, out of reach of children and away from food, animal feeding stuffs, medicines, etc. Store frost-free. Store at temperatures below 50°C.

7.3. Specific end use(s)

None.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits:

Ingredient:	Exposure limit	Remarks
Hydrogen peroxide solution	1 (8h), 2 (15m) ppm 1.4 (8h), 2.8 (15m) mg/m3	1)
Hydrogen peroxide solution	1 (8h), 2 (15m) ppm 1.5 (8h), 3 (15m) mg/m3	2)
Acetic acid	-	1)
Acetic acid	10 (8h), 15 (15 min) ppm 25 (8h), 37 (15 min) mg/m3	2)

Legal basis: 1) England: EH40/2005 Workplace exposure limits incl. supplement from October 2007.
2) Ireland: 2010 Code of Practice for the Safety, Health and Welfare at Work (Chemical Agents) Regulations 2001 (S.I. No. 619 of 2001)

Measuring methods: Compliance with the stated occupational exposure limits may be checked by occupational hygiene measurements.

8.2. Exposure controls

Appropriate engineering controls: Wear the personal protective equipment specified below. See also section 7.1.

Personal protective equipment, eye/face protection: Wear safety goggles/face protection. Eye protection must conform to EN 166.

Personal protective equipment, skin protection: Wear protective gloves made of nitrile or neoprene rubber. Gloves must conform to EN 374. Breakthrough time has not been determined for the product. Change gloves often.

Personal protective equipment, respiratory protection: In case of insufficient ventilation, wear respiratory protective equipment with filter B. Respiratory protection must conform to one of the following standards: EN 136/140/145.

Environmental exposure controls: Ensure compliance with local regulations for emissions.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

State:	Liquid
Colour:	Clear
Odour:	No data
Odour threshold:	No data
pH (solution for use):	4.5 (1%)
pH (concentrate):	3.5
Melting point/freezing point:	-14°C
Initial boiling point and boiling range:	218°C
Flash point:	No data
Evaporation rate:	No data
Flammability (solid, gas):	No data
Upper/lower flammability limits:	No data
Upper/lower explosive limits:	No data
Vapour pressure:	No data
Vapour density:	No data
Relative density:	1.05
Solubility:	Miscible with water

Partition coefficient n-octanol/water:	No data
Auto-ignition temperature:	No data
Decomposition temperature:	No data
Viscosity:	No data
Explosive properties:	No data
Oxidising properties:	No data

9.2. Other information

Dry matter: 18,2%

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is oxidising.

10.2. Chemical stability

The product is stable when used in accordance with the supplier's directions.

10.3. Possibility of hazardous reactions

The product is not flammable but may feed a fire in the same way as oxygen.

10.4. Conditions to avoid

Do not expose to heat (e.g. sunlight).

10.5. Incompatible materials

None known.

10.6. Hazardous decomposition products

None known.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral:	Harmful if swallowed. Test data are not available.
Acute toxicity - dermal:	The product does not have to be classified. Test data are not available.
Acute toxicity - inhalation:	The product does not have to be classified. Test data are not available.
Skin corrosion/irritation:	May irritate the skin – may cause reddening. The product does not have to be classified. Test data are not available.
Serious eye damage/eye irritation:	Eye contact may result in deep caustic burns, pain, tearing and cramping of the eyelids. Risk of serious eye injury and loss of sight. Test data are not available.
Respiratory sensitisation or skin sensitisation:	The product does not have to be classified. Test data are not available.
Germ cell mutagenicity:	The product does not have to be classified. Test data are not available.
Carcinogenic properties:	The product does not have to be classified. Test data are not available.
Reproductive toxicity:	The product does not have to be classified. Test data are not available.
Single STOT exposure:	Inhalation of spray mist may cause irritation to the upper airways. The product does not have to be classified. Test data are not available.
Repeated STOT exposure:	The product does not have to be classified. Test data are not available.
Aspiration hazard:	The product does not have to be classified. Test data are not available.
Other toxicological effects:	None known.

SECTION 12: Ecological information

12.1. Toxicity

The product does not have to be classified. Test data are not available.

12.2. Persistence and degradability

Test data are not available.

12.3. Bioaccumulative potential

No bioaccumulation expected.

7722-84-1: Partition coefficient n-octanol/water: -1,57

12.4. Mobility in soil

Test data are not available.

12.5. Results of PBT and vPvB assessment

No assessment has been made.

12.6. Other adverse effects

None known.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Avoid discharge to drain or surface water.

Collect spills and waste in closed, leak-proof containers for disposal at the local hazardous waste site.

EWC code: Depends on line of business and use, for instance 16 09 03 peroxides, for example hydrogen peroxide

Absorbent/cloth contaminated with the product:
EWC code: 15 02 02 absorbents, filter materials (including oil filters not otherwise specified), wiping cloths, protective clothing contaminated by dangerous substances

Uncleansed packaging is to be disposed of via the local waste-removal scheme.

SECTION 14: Transport information

ADR/RID

14.1. UN number	2984
14.2. UN proper shipping name	HYDROGEN PEROXIDE, AQUEOUS SOLUTION
14.3. Transport hazard class(es)	5.1
14.4. Packing group	III
Hazard identification number	50
Tunnel restriction code:	E
14.5. Environmental hazards	The product should not be labelled as an environmental hazard (symbol: fish and tree).

ADN

14.1. UN number	2984
14.2. UN proper shipping name	HYDROGEN PEROXIDE, AQUEOUS SOLUTION
14.3. Transport hazard class(es)	5.1
14.4. Packing group	III
14.5. Environmental hazards	The product should not be labelled as an environmental hazard (symbol: fish and tree).
Environmental hazard in tank vessels:	Not applicable.

IMDG

14.1. UN number	2984
14.2. UN proper shipping name	HYDROGEN PEROXIDE, AQUEOUS SOLUTION
14.3. Transport hazard class(es)	5.1
14.4. Packing group	

	III
14.5. Environmental hazards	The product is not a Marine Pollutant (MP).
IMDG Code segregation group:	-

ICAO/IATA

14.1. UN number	2984
14.2. UN proper shipping name	HYDROGEN PEROXIDE, AQUEOUS SOLUTION
14.3. Transport hazard class(es)	5.1
14.4. Packing group	III

14.6. Special precautions for user

None.

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Special provisions: Special care should be applied for employees under the age of 18. Young people under the age of 18 may not carry out any work causing harmful exposure to this product.

15.2. Chemical safety assessment

Chemical safety assessment has not been performed.

SECTION 16: Other information

Changes have been made in the following sections:	1
Abbreviation explanations:	PBT: Persistent, Bioaccumulative and Toxic vPvB: Very Persistent and Very Bioaccumulative STOT: Specific Target Organ Toxicity
Classification method:	
R-phrases:	R10 Flammable. R20/22 Harmful by inhalation and if swallowed. R35 Causes severe burns. R5 Heating may cause an explosion. R8 Contact with combustible material may cause fire.
H-phrases:	H226 Flammable liquid and vapour. H271 May cause fire or explosion, strong oxidiser. H302 Harmful if swallowed. H314 Causes severe skin burns and eye damage. H332 Harmful if inhaled.
Training:	A thorough knowledge of this safety data sheet should be a prerequisite condition.
