



analyticon

Analyticon® Biotechnologies AG

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Wash solution C-1

Revision date: 17.04.2019

Product code: 1RB0010

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

1.1. Product identifier

Wash solution C-1

Product group: Endprodukt

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

Use of the substance/mixture

In-vitro-Diagnostics

1.3. Details of the supplier of the safety data sheet

Company name: Analyticon® Biotechnologies AG
Street: Am Mühlenberg 10
Place: D-35104 Lichtenfels
Telephone: +49 (0) 6454/7991-0
e-mail: support@analyticon-diagnostics.com
Contact person: Zentrale
Internet: <http://www.analyticon-diagnostics.com>
Telefax: +49 (0) 6454/7991-30
Telephone: +49 (0) 6454/7991-0

1.4. Emergency telephone number:

Giftnotruf Mainz: +49 (0) 6131 / 19240

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No. 1272/2008

Hazard categories:

Skin corrosion/irritation: Skin Corr. 1

Serious eye damage/eye irritation: Eye Dam. 1

Hazardous to the aquatic environment: Aquatic Acute 1

Hazard Statements:

Causes severe skin burns and eye damage.

Causes serious eye damage.

Very toxic to aquatic life.

2.2. Label elements

Regulation (EC) No. 1272/2008

Hazard components for labelling

sodium hypochlorite, solution 12 % Cl active

potassium hydroxide; caustic potash

Signal word: Danger

Pictograms:



Hazard statements

H290 May be corrosive to metals.

H314 Causes severe skin burns and eye damage.

H400 Very toxic to aquatic life.

Precautionary statements

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P273 Avoid release to the environment.

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- P280 Wear protective gloves/protective clothing/eye protection/face protection.
- P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or 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/doctor.

Labelling of packages where the contents do not exceed 125 ml

Signal word: Danger

Pictograms:



Hazard statements

H314

Precautionary statements

P260-P280-P303+P361+P353-P305+P351+P338-P310

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hazardous components

CAS No	Chemical name	Quantity
	EC No	
	Index No	
	REACH No	
	GHS Classification	
7681-52-9	sodium hypochlorite, solution 12 % Cl active	<71 %
	231-668-3	
	017-011-00-1	
	Skin Corr. 1B, Aquatic Acute 1; H314 H400 EUH031	
107-21-1	ethanediol; ethylene glycol	<1 %
	203-473-3	
	603-027-00-1	
	Acute Tox. 4; H302	
1310-58-3	potassium hydroxide; caustic potash	<1 %
	215-181-3	
	019-002-00-8	
	Acute Tox. 4, Skin Corr. 1A; H302 H314	
107-41-5	2-methylpentane-2,4-diol	<1 %
	203-489-0	
	603-053-00-3	
	Eye Irrit. 2, Skin Irrit. 2; H319 H315	
6381-92-6	Ethylenediaminetetraacetic acid disodium salt dihydrate	<1 %
	205-358-3	
13517-24-3	Sodium metasilicate	<1 %
	229-912-9	
	Skin Corr. 1B, STOT SE 3; H314 H335	

Full text of H and EUH statements: see section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

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General information

Move victim out of danger zone.

After inhalation

Provide fresh air.

After contact with skin

After contact with skin, wash immediately with: Water.
Subsequently wash off with: Polyethylene glykol 400.
Remove contaminated, saturated clothing immediately.

After contact with eyes

Consult an ophthalmologist.

After ingestion

Do NOT induce vomiting.
Do not allow a neutralisation agent to be drunk.
Hazards identification: Stomach perforation.
Call a physician immediately.

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

Co-ordinate fire-fighting measures to the fire surroundings. The product itself does not burn.

5.3. Advice for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing.

Additional information

Suppress gases/vapours/mists with water spray jet. Contaminated fire-fighting water must be collected separately. Do not allow to enter into surface water or drains.

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

Provide adequate ventilation.
Do not breathe gas/fumes/vapour/spray.
Avoid contact with skin, eyes and clothes.
Wear personal protection equipment.
Wear breathing apparatus if exposed to vapours/dusts/aerosols.

6.2. Environmental precautions

Do not allow to enter into surface water or drains.
Prevent spread over a wide area (e.g. by containment or oil barriers).
Do not allow to enter into soil/subsoil.

6.3. Methods and material for containment and cleaning up

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents).
Treat the recovered material as prescribed in the section on waste disposal.

SECTION 7: Handling and storage**7.1. Precautions for safe handling****Advice on safe handling**

If handled uncovered, arrangements with local exhaust ventilation have to be used.
Do not breathe gas/fumes/vapour/spray.
Use only in well-ventilated areas.
The floor should be leak tight, jointless and not absorbent.

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All work processes must always be designed so that the following is excluded:
inhalation. skin contact. Eye contact.

Advice on protection against fire and explosion

Usual measures for fire prevention.
When using do not smoke.

Further information on handling

When using do not eat, drink, smoke, sniff.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed.
Keep only in the original container in a cool, well-ventilated place.

Hints on joint storage

The product is not: Combustible. Exclude sources of ignition-no smoking

Further information on storage conditions

Recommended storage temperature: of °C: 15 up to °C: 25
Protect against: heat. UV-radiation/sunlight.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m ³	fibres/ml	Category	Origin
107-41-5	2-Methylpentane-2,4-diol	25	123		TWA (8 h)	WEL
		25	123		STEL (15 min)	WEL
107-21-1	Ethane-1,2-diol, vapour	20	52		TWA (8 h)	WEL
		40	104		STEL (15 min)	WEL
1310-58-3	Potassium hydroxide	-	2		STEL (15 min)	WEL

8.2. Exposure controls

Appropriate engineering controls

If handled uncovered, arrangements with local exhaust ventilation have to be used.
Do not breathe gas/fumes/vapour/spray.

Protective and hygiene measures

Remove contaminated, saturated clothing immediately.
Protect skin by using skin protective cream.
After work, wash hands and face.
When using do not eat or drink.

Eye/face protection

Eye protection: Tightly sealed safety glasses.

Hand protection

Tested protective gloves are to be worn: German Industry Norms (DIN) / European Norms (EN): DIN EN 374
Breakthrough times and swelling properties of the material must be taken into consideration.

Skin protection

Suitable protective clothing: Lab apron.
Footwear: Chemical resistant safety shoes.

Respiratory protection

Respiratory protection necessary at: insufficient ventilation. Handling larger quantities.

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SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties**

Physical state:	liquid
Colour:	colourless
Odour:	characteristic
pH-Value (at 20 °C):	13,5

Changes in the physical state

Melting point:	The product has not been tested.
Initial boiling point and boiling range:	The product has not been tested.

Explosive properties

The study does not need to be conducted because there are no chemical groups associated with explosive properties present in the molecule.

Oxidizing properties

Not oxidizing.

Vapour pressure: Corresponds to the vapour pressure of water.

Density (at 20 °C): 1,09 g/cm³

Water solubility: completely miscible

SECTION 10: Stability and reactivity**10.4. Conditions to avoid**

May cause decomposition by long-term light influence.

10.6. Hazardous decomposition products

Carbon dioxide. Carbon monoxide. Nitrogen oxides (NO_x).

SECTION 11: Toxicological information**11.1. Information on toxicological effects****Acute toxicity**

No information available.



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CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
107-21-1	ethanediol; ethylene glycol				
	oral	ATE 500 mg/kg			
	dermal	LD50 10600 mg/kg	Rabbit	GESTIS	
1310-58-3	potassium hydroxide; caustic potash				
	oral	LD50 273 mg/kg	Rat	RTECS	
107-41-5	2-methylpentane-2,4-diol				
	oral	LD50 3700 mg/kg	Rat		
	dermal	LD50 8000 mg/kg	Rabbit		
6381-92-6	Ethylenediaminetetraacetic acid disodium salt dihydrate				
	oral	LD50 >2000 mg/kg	Ratte		

Irritation and corrosivity

after ingestion: Irritation and etching.

Hazards identification: Stomach perforation.

Sensitising effects

No information available.

Carcinogenic/mutagenic/toxic effects for reproduction

No information available.

STOT-repeated exposure

No information available.

Specific effects in experiment on an animal

No information available.

Additional information on tests

The classification was carried out according to the calculation method of the Preparations Directive (1999/45/EC).

SECTION 12: Ecological information

12.1. Toxicity

Very toxic to aquatic organisms.

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CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method
1310-58-3	potassium hydroxide; caustic potash					
	Acute fish toxicity	LC50	80 mg/l	96 h	Gambusia affinis	IUCLID
107-41-5	2-methylpentane-2,4-diol					
	Acute fish toxicity	LC50	8510 mg/l	96 h	Gambusia affinis	
	Acute crustacea toxicity	EC50	3200 mg/l	48 h	Daphnia magna	
6381-92-6	Ethylenediaminetetraacetic acid disodium salt dihydrate					
	Acute fish toxicity	LC50	>500 mg/l	96 h	Leuciscus idus	
	Acute algae toxicity	ErC50	10-100 mg/l	72 h	Algae	

12.2. Persistence and degradability

No data available

12.3. Bioaccumulative potential

No data available

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
107-21-1	ethanediol; ethylene glycol	-1,36
107-41-5	2-methylpentane-2,4-diol	0,58

12.4. Mobility in soil

No data available

12.6. Other adverse effects

No data available

Further information

Do not allow to enter into surface water or drains.

The classification was carried out according to the calculation method of the Preparations Directive (1999/45/EC).

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Advice on disposal

Do not allow to enter into surface water or drains.

Dispose of waste according to applicable legislation.

Dispose of waste according to "Kreislaufwirtschafts- und Abfallgesetz (KrW-/AbfG)".

Waste disposal number of waste from residues/unused products

160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; laboratory chemicals, consisting of or containing hazardous substances, including mixtures of laboratory chemicals; hazardous waste

Waste disposal number of used product

160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; laboratory chemicals, consisting of or containing hazardous substances, including mixtures of laboratory chemicals; hazardous waste

Waste disposal number of contaminated packaging



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150106 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); mixed packaging

Contaminated packaging

Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information**Land transport (ADR/RID)**

14.1. UN number: UN 1791
14.2. UN proper shipping name: HYPOCHLORITE SOLUTION
14.3. Transport hazard class(es): 8
14.4. Packing group: III
Hazard label: 8



Classification code: C9
Limited quantity: LQ7
Hazard No: 80
Tunnel restriction code: E

Other applicable information (land transport)

Special provisions: 521
E1
Transport category: 3

Inland waterways transport (ADN)

14.1. UN number: UN 1791
14.2. UN proper shipping name: HYPOCHLORITE SOLUTION
14.3. Transport hazard class(es): 8
14.4. Packing group: III
Hazard label: 8



Classification code: C9
Limited quantity: LQ7

Other applicable information (inland waterways transport)

Special provisions: 521
E1

Marine transport (IMDG)

14.1. UN number: UN 1791
14.2. UN proper shipping name: HYPOCHLORITE SOLUTION
14.3. Transport hazard class(es): 8
14.4. Packing group: III
Hazard label: 8



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Limited quantity: 5 L
EmS: F-A, S-B

Other applicable information (marine transport)

Special provisions: 223
E1

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number: UN 1791
14.2. UN proper shipping name: HYPOCHLORITE SOLUTION
14.3. Transport hazard class(es): 8
14.4. Packing group: III
Hazard label: 8



Limited quantity Passenger: 1 L
IATA-packing instructions - Passenger: 819
IATA-max. quantity - Passenger: 5 L
IATA-packing instructions - Cargo: 821
IATA-max. quantity - Cargo: 60 L

Other applicable information (air transport)

E1
: Y819
Special provisions: A3

SECTION 15: Regulatory information

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

EU regulatory information

Restrictions on use (REACH, annex XVII):
Entry 3: 2-methylpentane-2,4-diol

2004/42/EC (VOC): 0,9 %

National regulatory information

Water contaminating class (D): 2 - clearly water contaminating

SECTION 16: Other information

Changes

This data sheet contains changes from the previous version in section(s): 2,3,7,8,15.

Classification for mixtures and used evaluation method according to Regulation (EC) No. 1272/2008 [CLP]

Classification	Classification procedure
Skin Corr. 1; H314	On basis of test data
Eye Dam. 1; H318	Calculation method
Aquatic Acute 1; H400	Calculation method

Relevant H and EUH statements (number and full text)

H290 May be corrosive to metals.

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H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H400	Very toxic to aquatic life.
EUH031	Contact with acids liberates toxic gas.

Further Information

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

The information is based on present level of our knowledge. It does not, however, give assurances of product properties and establishes no contract legal rights.

The receiver of our product is singularly responsible for adhering to existing laws and regulations.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)