



analyticon

Analyticon® Biotechnologies AG

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Wash solution 3

Revision date: 13.03.2019

Product code: 1RB0013

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

1.1. Product identifier

Wash solution 3

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 Irrit. 2

Serious eye damage/eye irritation: Eye Dam. 1

Reproductive toxicity: Repr. 1B

Hazard Statements:

Causes skin irritation.

Causes serious eye damage.

May damage fertility. May damage the unborn child.

2.2. Label elements

Regulation (EC) No. 1272/2008

Hazard components for labelling

2-ethoxyethanol; ethylene glycol monoethyl ether

2-aminoethanol; ethanolamine

Signal word: Danger

Pictograms:



Hazard statements

H315 Causes skin irritation.

H318 Causes serious eye damage.

H360FD May damage fertility. May damage the unborn child.

Precautionary statements

P201 Obtain special instructions before use.

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

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P302+P352 IF ON SKIN: Wash with plenty of water.
 P308+P313 IF exposed or concerned: Get medical advice/attention.
 P310 Immediately call a POISON CENTER/doctor.

Special labelling of certain mixtures

EUH208 Contains oxirane, mono[(C12-14-alkyloxy)methyl] derivs.. May produce an allergic reaction.
 Restricted to professional users.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

non ionic surfactant in aqueous solution

Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	GHS Classification			
144-62-7	oxalic acid			<4,5 %
	205-634-3	607-006-00-8		
	Acute Tox. 4, Acute Tox. 4; H312 H302			
110-80-5	2-ethoxyethanol; ethylene glycol monoethyl ether			<4 %
	203-804-1	603-012-00-X		
	Flam. Liq. 3, Repr. 1B, Acute Tox. 3, Acute Tox. 4; H226 H360FD H331 H302			
141-43-5	2-aminoethanol; ethanolamine			<4 %
	205-483-3	603-030-00-8		
	Acute Tox. 4, Acute Tox. 4, Acute Tox. 4, Skin Corr. 1B; H332 H312 H302 H314			
68609-97-2	oxirane, mono[(C12-14-alkyloxy)methyl] derivs.			<1 %
	271-846-8	603-103-00-4		
	Skin Irrit. 2, Skin Sens. 1; H315 H317			

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

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Move victim out of danger zone.

After inhalation

Medical treatment necessary. Provide fresh air.

After contact with skin

After contact with skin, wash immediately with: Water. Change contaminated clothing. Medical treatment necessary.

After contact with eyes

If product gets into the eye, keep eyelid open and rinse immediately with large quantities of water, for at least 5 minutes. Subsequently consult an ophthalmologist.

After ingestion

Rinse mouth immediately and drink plenty of water. Induce vomiting when the affected person is not unconscious. Medical treatment necessary.

Caution if victim vomits: Risk of aspiration!

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

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Treat symptomatically.

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.

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.

Wear personal protection equipment.

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.

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 locked up. Store in a place accessible by authorized persons only. Keep container in a 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: up to °C:

Protect against: heat. UV-radiation/sunlight.

SECTION 8: Exposure controls/personal protection

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8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m ³	fibres/ml	Category	Origin
141-43-5	2-Aminoethanol	1	2.5		TWA (8 h)	WEL
		3	7.6		STEL (15 min)	WEL
110-80-5	2-Ethoxyethanol	2	8		TWA (8 h)	WEL
144-62-7	Oxalic acid	-	1		TWA (8 h)	WEL
		-	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.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: liquid
 Colour: colourless
 Odour: characteristic

pH-Value: 7

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: 1,02 g/cm³

Water solubility: completely miscible



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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 (NOx).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

Toxic. Acute toxicity, oral. Acute toxicity, dermal. No information available.

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
144-62-7	oxalic acid				
	oral	ATE 500 mg/kg			
	dermal	ATE 1100 mg/kg			
110-80-5	2-ethoxyethanol; ethylene glycol monoethyl ether				
	oral	ATE 500 mg/kg			
	inhalation vapour	ATE 3 mg/l			
	inhalation aerosol	ATE 0,5 mg/l			
	inhalation (4 h) gas	LC50 > 4000 ppm	Rat	RTECS	
141-43-5	2-aminoethanol; ethanolamine				
	oral	LD50 1515 mg/kg	Rat		
	dermal	LD50 1025 mg/kg	Rabbit	IUCLID	
	inhalation vapour	ATE 11 mg/l			
	inhalation aerosol	ATE 1,5 mg/l			

Irritation and corrosivity

No information available.

Sensitising effects

No information available.

Carcinogenic/mutagenic/toxic effects for reproduction

May impair fertility. @1101.B110346 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).

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SECTION 12: Ecological information**12.1. Toxicity**

No data available

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method
110-80-5	2-ethoxyethanol; ethylene glycol monoethyl ether					
	Acute fish toxicity	LC50 > 10000 mg/l	96 h	Lepomis macrochirus	IUCLID	
	Acute algae toxicity	ErC50 > 1000 mg/l	72 h	Desmodesmus subspicatus	IUCLID	
	Acute crustacea toxicity	EC50 > 10000 mg/l	48 h	Daphnia magna	IUCLID	
141-43-5	2-aminoethanol; ethanolamine					
	Acute fish toxicity	LC50 150 mg/l	96 h	Onchorhynchus mykiss	IUCLID	
	Acute algae toxicity	ErC50 22 mg/l	72 h	Desmodesmus subspicatus		
	Acute crustacea toxicity	EC50 65 mg/l	48 h	Daphnia magna		

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
110-80-5	2-ethoxyethanol; ethylene glycol monoethyl ether	-0,32
141-43-5	2-aminoethanol; ethanolamine	-1,91 (25°C)

12.4. Mobility in soil

No data available

12.6. Other adverse effects

No data available

Further information

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**

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



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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

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 2491
14.2. UN proper shipping name: ETHANOLAMINE SOLUTION
14.3. Transport hazard class(es): 8
14.4. Packing group: III
Hazard label: 8



Classification code: C7
Limited quantity: 5 L
Excepted quantity: E1
Transport category: 3
Hazard No: 80
Tunnel restriction code: E

Other applicable information (land transport)

Special provisions: 274 614
E1
Transport category: 2

Inland waterways transport (ADN)

14.1. UN number: UN 2491
14.2. UN proper shipping name: ETHANOLAMINE SOLUTION
14.3. Transport hazard class(es): 8
14.4. Packing group: III
Hazard label: 8



Classification code: C7
Limited quantity: 5 L
Excepted quantity: E1

Other applicable information (inland waterways transport)

Special provisions: 274 614 802
E1

Marine transport (IMDG)



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14.1. UN number: UN 2491
14.2. UN proper shipping name: ETHANOLAMINE SOLUTION
14.3. Transport hazard class(es): 8
14.4. Packing group: III
Hazard label: 8



Special Provisions: 223
Limited quantity: 5 L
Excepted quantity: E1
EmS: F-A, S-B

Other applicable information (marine transport)

Special provisions: 223, 274, 944
E1

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number: UN 2491
14.2. UN proper shipping name: ETHANOLAMINE SOLUTION
14.3. Transport hazard class(es): 8
14.4. Packing group: III
Hazard label: 8



Special Provisions: A3 A803
Limited quantity Passenger: 1 L
Passenger LQ: Y841
Excepted quantity: E1
IATA-packing instructions - Passenger: 852
IATA-max. quantity - Passenger: 5 L
IATA-packing instructions - Cargo: 856
IATA-max. quantity - Cargo: 60 L

Other applicable information (air transport)

E1
: Y611
Special provisions: A3 A4 A137

SECTION 15: Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****EU regulatory information**

Authorisations (REACH, annex XIV):

Substances of very high concern, SVHC (REACH, article 59):
2-ethoxyethanol; ethylene glycol monoethyl ether

Restrictions on use (REACH, annex XVII):

Entry 30: 2-ethoxyethanol; ethylene glycol monoethyl ether

2004/42/EC (VOC): 13,7 %

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National regulatory information

Water contaminating class (D): 1 - slightly water contaminating

SECTION 16: Other information

Changes

This data sheet contains changes from the previous version in section(s): 14.

Relevant H and EUH statements (number and full text)

H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H331	Toxic if inhaled.
H332	Harmful if inhaled.
H360FD	May damage fertility. May damage the unborn child.
EUH208	Contains oxirane, mono[(C12-14-alkyloxy)methyl] derivs.. May produce an allergic reaction.

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.)