

**UA Lyo**

Revision date: 09.11.2018

Product code: 2R46XX9

Page 1 of 7

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

UA Lyo

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 Mühlberg 10	
Place:	D-35104 Lichtenfels	
Telephone:	+49 (0) 6454/7991-0	Telefax: +49 (0) 6454/7991-30
e-mail:	support@analyticon-diagnostics.com	
Contact person:	Zentrale	Telephone: +49 (0) 6454/7991-0
Internet:	http://www.analyticon-diagnostics.com	

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 Irrit. 2

Respiratory or skin sensitisation: Resp. Sens. 1

Respiratory or skin sensitisation: Skin Sens. 1

Hazard Statements:

Causes skin irritation.

May cause an allergic skin reaction.

Causes serious eye irritation.

May cause allergy or asthma symptoms or breathing difficulties if inhaled .

2.2. Label elements**Regulation (EC) No. 1272/2008****Hazard components for labelling**

Peroxidase (POD), Horse-radish

Signal word: Danger

Pictograms:**Hazard statements**

H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled .

Precautionary statements

P280	Wear protective gloves/protective clothing/eye protection/face protection.
P342+P311	If experiencing respiratory symptoms: Call a POISON CENTER/doctor.



UA Lyo

Revision date: 09.11.2018

Product code: 2R46XX9

Page 2 of 7

P501

Dispose of contents/container to

SECTION 3: Composition/information on ingredients**3.2. Mixtures****Chemical characterization**

lyophilisate

Hazardous components

CAS No	Chemical name	Quantity		
	EC No	Index No	REACH No	
	Classification according to Regulation (EC) No. 1272/2008 [CLP]			
83-07-8	4-Aminoantipyrine			10 - < 15 %
	201-452-3			
	Acute Tox. 4, Skin Irrit. 2, Eye Irrit. 2, STOT SE 3; H302 H315 H319 H335			
14459-95-1	Potassium hexacyanoferrate(II)			5 - < 10 %
	237-722-2			
	Aquatic Chronic 3; H412 EUH032			
9003-99-0	Peroxidase (POD), Horse-radish			1 - < 5 %
	232-668-6			
	Resp. Sens. 1, Skin Sens. 1; H334 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

In case of breathing difficulties administer oxygen. Medical treatment necessary. Provide fresh air.

After contact with skinAfter contact with skin, wash immediately with: Water. Subsequently wash off with: Polyethylene glykol 400.
Remove contaminated, saturated clothing immediately. Medical treatment necessary.**After contact with eyes**

Rinse immediately carefully and thoroughly with eye-bath or water. In case of troubles or persistent symptoms, consult an ophthalmologist.

After ingestionIf swallowed, immediately drink: Water. Rinse mouth thoroughly with water.
Seek medical advice immediately.**4.3. Indication of any immediate medical attention and special treatment needed**

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.

5.3. Advice for firefighters

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

**UA Lyo**

Revision date: 09.11.2018

Product code: 2R46XX9

Page 3 of 7

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.
Avoid dust formation.
Do not breathe dust.
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

Take up mechanically.
Treat the recovered material as prescribed in the section on waste disposal.
Take up dust-free and set down dust-free.

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 dust. 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 dry. Keep container tightly closed. Keep locked up. Store in a place accessible by authorized persons only. Keep only in the original container in a cool, well-ventilated place.

Advice on storage compatibility

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

Further information on storage conditions

Recommended storage temperature: of °C: 2 up to °C: 8
Protect against: heat. UV-radiation/sunlight.

SECTION 8: Exposure controls/personal protection**8.1. Control parameters****8.2. Exposure controls****Appropriate engineering controls**

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe dust.

**UA Lyo**

Revision date: 09.11.2018

Product code: 2R46XX9

Page 4 of 7

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:	solid	
Colour:	colourless	
Odour:	characteristic	
pH-Value:		8

Changes in the physical state

Flash point: No flash point - measurement carried out until boiling temperature.

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.

Water solubility: highly soluble.

Solubility in other solvents

buffer

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.



UA Lyo

Revision date: 09.11.2018

Product code: 2R46XX9

Page 5 of 7

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
83-07-8	4-Aminoantipyrine				
	oral	LD50 mg/kg	1700	Ratte	
14459-95-1	Potassium hexacyanoferrate(II)				
	oral	LD50 mg/kg	3613	Rat	

Irritation and corrosivity

No information available.

Sensitising effects

May cause sensitization by inhalation and skin contact. 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**

The product has not been tested.

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method
14459-95-1	Potassium hexacyanoferrate(II)					
	Acute crustacea toxicity	EC50	32 mg/l	48 h	Daphnia	

12.2. Persistence and degradability

The product has not been tested.

12.3. Bioaccumulative potential

The product has not been tested.

12.4. Mobility in soil

The product has not been tested.

12.6. Other adverse effects

The product has not been tested.

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**

Dispose of waste according to applicable legislation.

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



UA Lyo

Revision date: 09.11.2018

Product code: 2R46XX9

Page 6 of 7

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:	No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name:	No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es):	No dangerous good in sense of this transport regulation.
14.4. Packing group:	No dangerous good in sense of this transport regulation.

Inland waterways transport (ADN)

14.1. UN number:	No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name:	No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es):	No dangerous good in sense of this transport regulation.
14.4. Packing group:	No dangerous good in sense of this transport regulation.

Marine transport (IMDG)

14.1. UN number:	No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name:	No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es):	No dangerous good in sense of this transport regulation.
14.4. Packing group:	No dangerous good in sense of this transport regulation.

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number:	No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name:	No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es):	No dangerous good in sense of this transport regulation.
14.4. Packing group:	No dangerous good in sense of this transport regulation.

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

14.6. Special precautions for user

No dangerous good in sense of this transport regulation.

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

No dangerous good in sense of this transport regulation.

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

Water contaminating class (D): 3 - highly water contaminating

SECTION 16: Other information**Relevant H and EUH statements (number and full text)**

H302	Harmful if swallowed.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.
H412	Harmful to aquatic life with long lasting effects.



analyticon

Analyticon® Biotechnologies AG

Safety Data Sheet

according to Regulation (EC) No 1907/2006

UA Lyo

Revision date: 09.11.2018

Product code: 2R46XX9

Page 7 of 7

EUH032 Contact with acids liberates very 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.)