according to UK REACH Regulation

Eluent solution

Revision date: 07.10.2022

Product code: PE-SC-07-R-V1

Page 1 of 6

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

1.1. Product identifier

Eluent solution

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

1.3. Details of the supplier of the safety data sheet

Company name:	ABX advanced biochemical com	pounds	
	Biomedizinische Forschungsreag	genzien GmbH	
Street:	Heinrich-Gläser-Straße 10-14		
Place:	01454 Radeberg		
Telephone:	+49 3528 4041 60	Telefax: +49 3528 4041 65	
e-mail:	info@abx.de		
Contact person:	Dr. Christoph Meyer	Telephone: +49 3528 4041 8732	
e-mail:	meyer@abx.de		
Internet:	http://www.abx.de		
1.4. Emergency telephone	+49 3528 4041 60		

number:

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GB CLP Regulation

Hazard categories: Flammable liquid: Flam. Liq. 2 Acute toxicity: Acute Tox. 4 Serious eye damage/eye irritation: Eye Irrit. 2 Hazard Statements: Highly flammable liquid and vapour. Harmful if swallowed or if inhaled. Causes serious eye irritation.

2.2. Label elements

GB CLP Regulation

Hazard components for labelling

acetonitrile; cyanomethane Cryptand 222 Potassium carbonate

Signal word:

Pictograms:



Hazard statements

H225	Highly flammable liquid and vapour.
H302+H332	Harmful if swallowed or if inhaled.
H319	Causes serious eye irritation.

Precautionary statements

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No
F210	
	smoking.
P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing
	protection.

according to UK REACH Regulation

Eluent solution

Revision date: 07.10.2022

Product code: PE-SC-07-R-V1

Page 2 of 6

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hazardous components

Chemical name			Quantity
EC No	Index No	REACH No	
Classification (GB CLP Regulation)			
acetonitrile; cyanomethane			40 - < 45 %
200-835-2	608-001-00-3		
Flam. Liq. 2, Acute Tox. 4, Acute T	ox. 4, Acute Tox. 4, Eye Irrit. 2; H225	H332 H312 H302 H319	
Cryptand 222			1 - < 5 %
245-962-4			
Acute Tox. 4, Skin Irrit. 2, Eye Dam	. 1; H302 H315 H318	•	
Potassium carbonate			1 - < 5 %
209-529-3			
Acute Tox. 4, Skin Irrit. 2, Eye Irrit.	2, STOT SE 3; H302 H315 H319 H3	35	
	EC No Classification (GB CLP Regulation) acetonitrile; cyanomethane 200-835-2 Flam. Liq. 2, Acute Tox. 4, Acute To Cryptand 222 245-962-4 Acute Tox. 4, Skin Irrit. 2, Eye Dam Potassium carbonate 209-529-3	EC No Index No Classification (GB CLP Regulation) acetonitrile; cyanomethane 200-835-2 608-001-00-3 Flam. Liq. 2, Acute Tox. 4, Acute Tox. 4, Acute Tox. 4, Eye Irrit. 2; H225 Cryptand 222 245-962-4 Acute Tox. 4, Skin Irrit. 2, Eye Dam. 1; H302 H315 H318 Potassium carbonate 209-529-3	EC No Index No REACH No Classification (GB CLP Regulation) acetonitrile; cyanomethane 200-835-2 608-001-00-3 200-835-2 608-001-00-3 508-001-00-3 508-001-00-3 Flam. Liq. 2, Acute Tox. 4, Acute Tox. 4, Acute Tox. 4, Eye Irrit. 2; H225 H332 H312 H302 H319 Cryptand 222 245-962-4 4 4 Acute Tox. 4, Skin Irrit. 2, Eye Dam. 1; H302 H315 H318 508-001-00-3 Potassium carbonate 508-001-00-3 508-001-00-3

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

Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
	Specific Conc.	Limits, M-factors and ATE	
75-05-8	200-835-2	acetonitrile; cyanomethane	40 - < 45 %
	inhalation: LC50 = 11 mg/l (vapours); inhalation: LC50 = 11 mg/l (dusts or mists); dermal: LD50 = 988 mg/kg; oral: ATE = 500 mg/kg		
23978-09-8	245-962-4	Cryptand 222	1 - < 5 %
	oral: ATE = 500 mg/kg		
584-08-7	209-529-3	Potassium carbonate	1 - < 5 %
	oral: ATE = 50	0 mg/kg	

SECTION 4: First aid measures

4.1. Description of first aid measures

After contact with skin

After contact with skin, wash immediately with plenty of water and soap.

After contact with eyes

In case of contact with eyes, rinse immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Subsequently consult an ophthalmologist.

After ingestion

Let water be drunken in little sips (dilution effect). Call a physician in any case!

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Co-ordinate fire-fighting measures to the fire surroundings. In case of fire: Wear self-contained breathing apparatus.

Additional information

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: Accidental release measures

according to UK REACH Regulation

Eluent solution

Revision date: 07.10.2022

Product code: PE-SC-07-R-V1

Page 3 of 6

6.1. Personal precautions, protective equipment and emergency procedures

General advice

Wear personal protection equipment.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

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

Further information on storage conditions

Storage at below °C: + 30

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m³	fibres/ml	Category	Origin
75-05-8	Acetonitrile	40	68		TWA (8 h)	WEL
		60	102		STEL (15 min)	WEL

8.2. Exposure controls

SECTION 9: Physical and chemical properties 9.1. Information on basic physical and chemical properties Physical state: liquid Colour: colourless Changes in the physical state < 23 °C</td> Flash point: < 23 °C</td> Water solubility: easily soluble. SECTION 10: Stability and reactivity

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in GB CLP Regulation

according to UK REACH Regulation

Eluent solution

Revision date: 07.10.2022

Product code: PE-SC-07-R-V1

Page 4 of 6

Acute toxicity

CAS No	Chemical name					
	Exposure route	Dose		Species	Source	Method
75-05-8	acetonitrile; cyanometh	ane				
	oral	ATE mg/kg	500			
	dermal	LD50 mg/kg	988	Rabbit	IUCLID	
	inhalation vapour	LC50	11 mg/l			
	inhalation dust/mist	LC50	11 mg/l			
23978-09-8	Cryptand 222					
	oral	ATE mg/kg	500			
584-08-7	Potassium carbonate					
	oral	ATE mg/kg	500			

SECTION 12: Ecological information

12.1. Toxicity

CAS No	Chemical name				
	Aquatic toxicity	Dose	[h] [d] Species	Source	Method
75-05-8	acetonitrile; cyanomethane	9			
	Acute fish toxicity	LC50 1640 mg/l	96 h Pimephales promelas	IUCLID	

12.3. Bioaccumulative potential

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
75-05-8	acetonitrile; cyanomethane	-0,34

12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to UK REACH.

12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Remove according to the regulations.

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	or ID	number:

UN 1648

according to UK REACH Regulation

Revision date: 07.10.2022	Eluent solution Product code: PE-SC-07-R-V1	Page 5 of 6
14.2. UN proper shipping name:	ACETONITRILE, Mixture	
14.3. Transport hazard class(es):	3	
14.4. Packing group:		
Hazard label:	3	
Classification code:	F1	
Limited quantity:	1 L	
Excepted quantity:	E2	
Transport category:	2	
Hazard No:	33	
Tunnel restriction code:	D/E	
Inland waterways transport (ADN)		
14.1. UN number or ID number:	UN 1648	
14.2. UN proper shipping name:	ACETONITRILE, Mixture	
<u>14.3. Transport hazard class(es):</u>	3	
14.4. Packing group:	II	
Hazard label:	3	
Classification code:	F1	
Limited quantity:	1L	
Excepted quantity:	E2	
Marine transport (IMDG)		
<u>14.1. UN number or ID number:</u>	UN 1648	
14.2. UN proper shipping name:	ACETONITRILE, Mixture	
14.3. Transport hazard class(es):	3	
14.4. Packing group:	II	
Hazard label:	3	
Special Provisions:	-	
Limited quantity:	1L	
Excepted quantity:	E2	
EmS:	F-E, S-D	
Air transport (ICAO-TI/IATA-DGR)		
14.1. UN number or ID number:	UN 1648	
14.2. UN proper shipping name:	ACETONITRILE, Mixture	
14.3. Transport hazard class(es):	3	
14.4. Packing group:		
Hazard label:	3	
Limited quantity Passenger:	1 L	
Passenger LQ:	Y341 E2	
Excepted quantity: IATA-packing instructions - Passenger:	E2 353	
IATA-packing instructions - Passenger: IATA-max. quantity - Passenger:	5 L	
IATA-max. quality - Passenger. IATA-packing instructions - Cargo:	364	
IATA-packing instructions - Cargo:	60 L	
With Max. quantity - Ourgo.	00 E	

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, Entry 40, Entry 75

National regulatory information

Water hazard class (D):

2 - obviously hazardous to water

according to UK REACH Regulation

Eluent solution

Revision date: 07.10.2022

Product code: PE-SC-07-R-V1

Page 6 of 6

SECTION 16: Other information

Relevant H and EUH statements (number and full text)

H225	Highly flammable liquid and vapour.
H302	Harmful if swallowed.
H302+H332	Harmful if swallowed or if inhaled.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.

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