

Safety Data Sheet

according to UK REACH Regulation

TBA solution

Revision date: 12.03.2024

Product code: PEDP-0068-V1

Page 1 of 6

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

TBA solution

Further trade names

Tetrabutylammonium hydrogen carbonate solution; Tetrabutylammonium bicarbonate

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 compounds Biomedizinische Forschungsreagenzien 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 number: +49 3528 4041 60

SECTION 2: Hazards identification**2.1. Classification of the substance or mixture****GB CLP Regulation**

Flam. Liq. 2; H225
Acute Tox. 4; H302
Skin Irrit. 2; H315
Eye Irrit. 2; H319

Full text of hazard statements: see SECTION 16.

2.2. Label elements**GB CLP Regulation****Hazard components for labelling**

acetonitrile; cyanomethane

Signal word: Danger**Pictograms:****Hazard statements**

H225	Highly flammable liquid and vapour.
H302	Harmful if swallowed.
H315	Causes skin irritation.
H319	Causes serious eye irritation.

Precautionary statements

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233	Keep container tightly closed.
P240	Ground and bond container and receiving equipment.
P241	Use explosion-proof electrical/ventilating/lighting equipment.

Safety Data Sheet

according to UK REACH Regulation

TBA solution

Revision date: 12.03.2024

Product code: PEDP-0068-V1

Page 2 of 6

P242	Use non-sparking tools.
P243	Take action to prevent static discharges.
P270	Do not eat, drink or smoke when using this product.
P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
P301+P312	IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
P330	Rinse mouth.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
P332+P313	If skin irritation occurs: Get medical advice/attention.
P362+P364	Take off contaminated clothing and wash it before reuse.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313	If eye irritation persists: Get medical advice/attention.
P403+P235	Store in a well-ventilated place. Keep cool.

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

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (GB CLP Regulation)			
75-05-8	acetonitrile; cyanomethane			45 - < 50 %
	200-835-2	608-001-00-3		
	Flam. Liq. 2, Acute Tox. 4, Acute Tox. 4, Acute Tox. 4, Eye Irrit. 2; H225 H332 H312 H302 H319			
147741-30-8	Tetrabutylammonium hydroxide 30-hydrate			1 - < 5 %
	Skin Corr. 1B; H314			

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	45 - < 50 %
		inhalation: LC50 = 11 mg/l (vapours); inhalation: LC50 = 11 mg/l (dusts or mists); dermal: LD50 = 988 mg/kg; oral: ATE = 500 mg/kg	

SECTION 4: First aid measures**4.1. Description of first aid measures****After inhalation**

Remove casualty to fresh air and keep warm and at rest. In case of irregular breathing or respiratory arrest provide artificial respiration. Call a physician in any case!

After contact with skin

Take off immediately all contaminated clothing, including underwear and shoes. After contact with skin, wash immediately with plenty of water and soap. Call a physician in any case!

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

Do NOT induce vomiting. Never give anything by mouth to an unconscious person or a person with cramps. Rinse mouth thoroughly with water. Medical treatment necessary.

Safety Data Sheet

according to UK REACH Regulation

TBA solution

Revision date: 12.03.2024

Product code: PEDP-0068-V1

Page 3 of 6

SECTION 5: Firefighting measures**5.1. Extinguishing media****Suitable extinguishing media**Water spray. alcohol resistant foam. Carbon dioxide (CO₂). Dry extinguishing powder.**5.2. Special hazards arising from the substance or mixture**In case of fire may be liberated: Carbon dioxide. Carbon monoxide Nitrogen oxides (NO_x).**5.3. Advice for firefighters**

In case of fire: Wear self-contained breathing apparatus.

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

Wear personal protection equipment. Do not breathe gas/fumes/vapour/spray. Provide adequate ventilation.

Remove persons to safety.

6.2. Environmental precautions

Do not allow to enter into surface water or drains.

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

Wash hands before breaks and after work. Do not eat, drink, smoke or sneeze at the workplace.

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 temperature:

of °C: 2

up to °C: 8

Protect against: Light.

SECTION 8: Exposure controls/personal protection**8.1. Control parameters****Exposure limits (EH40)**

CAS No	Substance	ppm	mg/m ³	fibres/ml	Category	Origin
75-05-8	Acetonitrile	40	68		TWA (8 h)	WEL
		60	102		STEL (15 min)	WEL
64-17-5	Ethanol	1000	1920		TWA (8 h)	WEL

8.2. Exposure controls**Individual protection measures, such as personal protective equipment****Eye/face protection**

Tightly sealed safety glasses.

Hand protection

Tested protective gloves are to be worn: Single-use gloves. NBR (Nitrile rubber).

Safety Data Sheet

according to UK REACH Regulation

TBA solution

Revision date: 12.03.2024

Product code: PEDP-0068-V1

Page 4 of 6

Skin protection

Lab apron. Chemical resistant safety shoes.

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

Physical state: liquid
 Colour: colourless, clear
 Flash point: ca. 10 °C
 Water solubility: easily soluble.

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

Light.

10.5. Incompatible materials

Oxidizing agents, strong.

SECTION 11: Toxicological information**11.1. Information on hazard classes as defined in GB CLP Regulation****ATE_{mix} calculated**

ATE (oral) 1014 mg/kg; ATE (dermal) > 2000 mg/kg; ATE (inhalation vapour) > 20 mg/l; ATE (inhalation dust/mist) > 5 mg/l

Acute toxicity

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
75-05-8	acetonitrile; cyanomethane				
	oral	ATE 500 mg/kg			
	dermal	LD50 988 mg/kg	Rabbit	IUCLID	
	inhalation vapour	LC50 11 mg/l			
	inhalation dust/mist	LC50 11 mg/l			

11.2. Information on other hazards**Further information**

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

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

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

12.3. Bioaccumulative potential

Safety Data Sheet

according to UK REACH Regulation

TBA solution

Revision date: 12.03.2024

Product code: PEDP-0068-V1

Page 5 of 6

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.

Further information

There are no data available on the mixture itself.

SECTION 13: Disposal considerations**13.1. Waste treatment methods****Disposal recommendations**

Consult the appropriate local waste disposal expert about waste disposal.

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

14.1. UN number or ID number:	UN 2924
14.2. UN proper shipping name:	FLAMMABLE LIQUID, CORROSIVE, N.O.S.
14.3. Transport hazard class(es):	3
14.4. Packing group:	II
Hazard label:	3+8
Classification code:	FC
Special Provisions:	274
Limited quantity:	1 L
Excepted quantity:	E2
Transport category:	2
Hazard No:	338
Tunnel restriction code:	D/E

Inland waterways transport (ADN)

14.1. UN number or ID number:	UN 2924
14.2. UN proper shipping name:	FLAMMABLE LIQUID, CORROSIVE, N.O.S.
14.3. Transport hazard class(es):	3
14.4. Packing group:	II
Hazard label:	3+8
Classification code:	FC
Special Provisions:	274
Limited quantity:	1 L
Excepted quantity:	E2

Marine transport (IMDG)

14.1. UN number or ID number:	UN 2924
14.2. UN proper shipping name:	FLAMMABLE LIQUID, CORROSIVE, N.O.S.
14.3. Transport hazard class(es):	3
14.4. Packing group:	II
Hazard label:	3+8
Special Provisions:	274
Limited quantity:	1 L
Excepted quantity:	E2
EmS:	F-E, S-C

Safety Data Sheet

according to UK REACH Regulation

TBA solution

Revision date: 12.03.2024

Product code: PEDP-0068-V1

Page 6 of 6

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number or ID number:	UN 2924
14.2. UN proper shipping name:	FLAMMABLE LIQUID, CORROSIVE, N.O.S.
14.3. Transport hazard class(es):	3
14.4. Packing group:	II
Hazard label:	3+8
Special Provisions:	A3
Limited quantity Passenger:	0.5 L
Passenger LQ:	Y340
Excepted quantity:	E2
IATA-packing instructions - Passenger:	352
IATA-max. quantity - Passenger:	1 L
IATA-packing instructions - Cargo:	363
IATA-max. quantity - Cargo:	5 L

Other applicable information

Hazchem code: •3WE

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

SECTION 16: Other information**Abbreviations and acronyms**

Flam. Liq: Flammable liquids

Acute Tox: Acute toxicity

Skin Corr: Skin corrosion

Skin Irrit: Skin irritation

Eye Irrit: Eye irritation

Classification for mixtures and used evaluation method according to GB CLP Regulation

Classification	Classification procedure
Flam. Liq. 2; H225	On basis of test data
Acute Tox. 4; H302	Calculation method
Skin Irrit. 2; H315	Calculation method
Eye Irrit. 2; H319	Calculation method

Relevant H and EUH statements (number and full text)

H225	Highly 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.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.

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