

Safety Data Sheet

according to UK REACH Regulation

Tetrabutylammonium Hydrogen Carbonate Solution (0.075M)

Revision date: 01.07.2022

Product code: 808.0000.750

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

Tetrabutylammonium Hydrogen Carbonate Solution (0.075M)

Further trade names

Tetrabutylammonium hydrogen carbonate solution; Tetrabutylammonium bicarbonate

CAS No: 17351-62-1

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

reagent for radiolabelling synthesis / labelling of PET molecules using the GE TRACERlab FXFDG Synthesizer(r) module

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. 3; H226
 Skin Corr. 1B; H314
 Eye Dam. 1; H318

Full text of hazard statements: see SECTION 16.

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

Tetrabutylammonium hydroxide 30-hydrate

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

H226 Flammable liquid and vapour.
 H314 Causes severe skin burns and eye damage.

Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
 P233 Keep container tightly closed.

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P240	Ground and bond container and receiving equipment.
P241	Use explosion-proof electrical/ventilating/lighting equipment.
P242	Use non-sparking tools.
P243	Take action to prevent static discharges.
P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P264	Wash ... thoroughly after handling.
P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
P301+P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
P363	Wash contaminated clothing before reuse.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P310	Immediately call a POISON CENTER/doctor.
P321	Specific treatment (see ... on this label).
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.
P370+P378	In case of fire: Use ... to extinguish.
P403+P235	Store in a well-ventilated place. Keep cool.
P405	Store locked up.
P501	Dispose of contents/container to

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

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (GB CLP Regulation)			
64-17-5	ethanol; ethyl alcohol			5 - < 10 %
	200-578-6	603-002-00-5		
	Flam. Liq. 2; H225			
147741-30-8	Tetrabutylammonium hydroxide 30-hydrate			5 - < 10 %
	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		
64-17-5	200-578-6	ethanol; ethyl alcohol	5 - < 10 %
	inhalation: LC50 = 95,6 mg/l (vapours); oral: LD50 = 6200 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!

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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.

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

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

CAS No	Substance	ppm	mg/m ³	fibres/ml	Category	Origin
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.

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Hand protection

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

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

Changes in the physical state

pH-Value: 8-10

9.2. Other information

Other safety characteristics

Solvent content: 7,60 %, water: 86,60 %

Further Information

SECTION 10: Stability and reactivity

10.5. Incompatible materials

Oxidizing agents, strong.

SECTION 11: Toxicological information

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

Acute toxicity

CAS No	Chemical name					
	Exposure route	Dose	Species	Source	Method	
64-17-5	ethanol; ethyl alcohol					
	oral	LD50 mg/kg	6200	Rat	IUCLID	
	inhalation (4 h) vapour	LC50	95,6 mg/l	Rat	RTECS	

Further information

No information available.

SECTION 12: Ecological information

12.1. Toxicity

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method
64-17-5	ethanol; ethyl alcohol					
	Acute crustacea toxicity	EC50	9268 - 14221 mg/l	48 h	Daphnia magna	IUCLID

12.3. Bioaccumulative potential

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
64-17-5	ethanol; ethyl alcohol	-0,31

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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**Other applicable information**

No dangerous good in sense of these transport regulations.

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

National regulatory information

Water hazard class (D): 2 - obviously hazardous to water

SECTION 16: Other information**Classification for mixtures and used evaluation method according to GB CLP Regulation**

Classification	Classification procedure
Flam. Liq. 3; H226	On basis of test data
Skin Corr. 1B; H314	Calculation method
Eye Dam. 1; H318	Calculation method

Relevant H and EUH statements (number and full text)

H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.

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