



Safety Data Sheet

According to Regulation (EC) no. 1907/2006

Product Name

TETRABUTYLAMMONIUM HYDROXIDE, 40 wt. % SOLUTION IN WATER

1.0 Chemical product and company identification

1.1 Product Identifier

MSDS Name:

TETRABUTYLAMMONIUM HYDROXIDE, 40 wt. % SOLUTION IN WATER

Substance name:

TETRABUTYLAMMONIUM HYDROXIDE, 40 wt. % SOLUTION IN WATER

CAS No:

Not Assigned

PRODUCT CODE:

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

Use of the Substance / Mixture:

Laboratory Chemicals

Recommended restrictions on use:

Use only as above

1.3 Details of the supplier of the safety data sheet

Company Identification:

SOLUMETRICS LTD,
UNIT 1B SILEBY ROAD INDUSTRIAL ESTATE. BARROW ON SOAR, LEIC'S. LE12 8LP.

For information call.

+44 (0)1509 815348

For emergencies call.

+44 (0)1509 815348

2.0 Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) no 1272/2008

SKIN CORROSION / IRRITATION	CATEGORY 1 A
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Symbols

C - Corrosive

Hazard Symbol / Category of Danger

H314

Hazard Statements:

Causes severe skin burns and eye damage

Hazard Symbol / Category of Danger

R35

Risk Phrases

Causes severe burns

For the full text of the R-Phrases in this section, see Section 16.

2.2 Label Elements

Labelling according to regulation (EC) No 1272/2008

HAZARDS SYMBOLS



Signal Word:

DANGER

Precautionary statements

Prevention

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

Response

P301+330+331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting

P305+351+338: IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing

P310: Immediately call a POISON CENTER or doctor/physician

P303+361+353: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower

3.0 Composition/ Information on ingredients

CAS No	CHEMICAL NAME	Risk Phrases	EC No.	GHSC CLAS	%
7732-18-5	Water 7732-18-5		231-791-2		60%
2052-49-5	1-Butanaminium, N,N,N-tributyl- hydroxide 2052-49-5	C;R35	218-147-6	Skin Corr. 1A (H314)	40%

3.1 Substances

For the full text of the R Phrases mentioned in this section, see Section 16

4.0 First Aid measures**4.1 Description of first aid measures****General Advice**

If Inhaled:	Move to fresh air if breathing, Give Oxygen Do not use mouth-to-mouth resuscitation if victim ingested or inhaled the substance; induce artificial respiration with a respiratory medical device immediate medical attention is required.
In Case of Skin contact:	Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes immediate medical attention is required
In case of eye contact:	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Consult an eye specialist immediately. Go to an ophthalmic hospital if possible
If Swallowed:	Do not induce vomiting Never give anything by mouth to an unconscious person Drink plenty of water call a physician immediately if possible drink milk afterwards

5.0 FIRE FIGHTING MEASURES**5.1 Extinguishing media**

Suitable extinguishing Media:	Carbon Dioxide (CO2) Dry Chemical Chemical Foam
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5.2 Special hazards arising from the substance or mixture

Specific hazards during fire fighting:	Thermal decomposition can lead to release of irritating gases and vapors
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5.3 Advice for fire-fighters

Special protective equipment for fire-fighters:	In the event of fire, wear self-contained breathing apparatus. Wear appropriate body protection (full protective suit) and self-contained breathing apparatus pressure- demand MSHA/NIOSH (approved or equivalent) and full protective gear Thermal Decomposition can lead to release of irritating gases and vapors
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6.0 Accidental release measures**6.1 Personal precautions, protective equipment and emergency procedures**

Personal Precautions:	Ventilate the area to dispel possible toxic decomposition fumes. Wear appropriate protective clothing. Use personal protective equipment. Keep away unprotected persons. Danger of slipping if spilled. Avoid contact with skin and eyes.
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6.2 Environmental precautions:

Contain and absorb using earth, sand or other inert material. Transfer into suitable containers for recovery or disposal. Do not flush into surface water or sanitary sewer system. Avoid subsoil penetration. If the product contaminates rivers and lakes or drains inform respective authorities. If material reaches soil inform authorities responsible for such cases

6.3 Methods and materials for containment and cleaning up:

Soak up with inert absorbent material Keep in suitable and closed containers for disposal

Further Information:

Advise Authorities if spillage has entered water course or sewer or has contaminated soil or vegetation.

7.0 Handling and storage**7.1 Precautions for safe handling**

Advice on safe handling:	Avoid contact with skin and eyes Do not breathe dust Do not breathe vapors or spray mist Avoid contact with clothing Use only in area provided with appropriate exhaust ventilation
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Hygiene measures:	Keep containers tightly closed in a dry, cool and well ventilated place.
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7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage area containers:	Keep containers tightly closed in a dry, cool and well ventilated place Keep away from heat source of ignition Keep refrigerated Keep away from oxidizing agents
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Advice on Protection Against fire and explosion:	Keep container tightly closed and in well ventilated area. Keep away from heat and direct sunlight. Store this product in a secure area to prevent unauthorised use.
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Further information on storage conditions:	Keep tightly closed in a dry and cool place. Keep in well ventilated place.
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Advice on common storage:	Keep away from food, drink and animal feeding stuffs.
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8.0 Exposure controls/ personal protection**8.1 Control parameters**

Exposure Limits	This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies
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Derived No Effect Level (DNEL)	No Data
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Predicted No effect Concentration (PNEC)	No Data
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Exposure Control

Engineering Measures	Ensure adequate ventilation, especially in confined areas Ensure that eyewash stations and showers are close to the workstation location
Personal Protective Equipment	
Eye Protection	Goggles
Hand Protection	Protective Gloves
Skin and Body Protection	Wear appropriate protective gloves and clothing to prevent skin exposure
Respiratory Protection	Follow the OSHA respirator regulations found in 29CFR 1910.134 or European standards EN149. Use a NIOSH/MSHA or European standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced
Hygiene Measures	Handle in accordance with good industrial hygiene and safety practice
Environmental Exposure controls	No Data

9.0 Physical and chemical properties

9.1 Information on basic physical and chemical properties

Form	Liquid
Colour	Light Yellow
Odour	No Data
PH	14
Vapor Pressure	No Data
Vapor Density	No Data
Freezing Point	No Data
Boiling Point	No Data
Decomposition Temperature	>80C
Flash Point	No Data
Molecular Formula	C16 H37 N O
Molecular Weight	259.46
Water Solubility	Soluble
Specific Gravity	0.995

10.0 Stability and reactivity	This product is stable
10.1 Reactivity	No Data
10.2 Chemical stability	Stable under recommended storage conditions
10.3 Possibility of hazardous reactions	
Hazardous Polymerization:	Hazardous polymerization does not occur
Hazardous Reaction:	No Data
10.4 Conditions to avoid	Incompatible products, Excess heat
10.5 Incompatible materials	
Materials to avoid:	Strong Oxidizing Agents Strong Acids
10.6 Hazardous decomposition products	Carbon Monoxide (CO) Nitrogen Oxides (NOx) Carbon Dioxide (CO2)

11.0 Toxicological Information

11.1 Information on toxicological effects

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Water	90 mL/kg (Rat)		

Product Information	Product does not present an acute toxicity hazard based on known information
Chronic Toxicity	
Carcinogenicity	There are no known carcinogenic chemicals in this product
Sensitization	No information available
Mutagenic Effects	No information available
Reproductive Effects	No information available
Development Effects	No information available
Target Organs	No information available
Endocrine Disruptor Information	No information available

12.0 Toxicity

Ecological Information	Contains no substances known to be hazardous to the environment or that are not degradable in waste water treatment plants
Persistence and degradability	Not readily biodegradable
Bioaccumulative potential	No information available
Component	Low Pow
Water	-1.87
Mobility in Soil	
Results of PBT and vPvB assessment	
Other adverse effects	No information available

13.0 Disposal considerations

13.1 Waste treatment methods

Product	Disposal together with normal waste is not allowed. Special disposal required to local regulations. Do not let product enter drains. Contact waste disposal services.
Contaminated Packaging	Empty contaminated packagings thoroughly. They can be recycled after thorough and proper cleaning. Packagings that cannot be cleaned are to be disposed of in the same manner as the product.
European Waste Catalogue Number	No waste code according to the European Waste Catalogue can be assigned for this product, as the intended use dictates the assignment. The waste code is established in consultation with the regional waste disposer.

14.0 Transport information

14.1 UN number	1760
14.2	
Hazard Class	8
Subsidiary Hazard Class	
Packing Group	II
14.3 Transport hazard class(es)	
ADR-Class	8
Subsidiary Hazard Class (labels; Classification Code; Hazard Identification No; Tunnel restriction code)	II
Proper Shipping Name	CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S
RID-Class	8
Subsidiary Hazard Class (labels; Classification Code; Hazard Identification No; Tunnel restriction code)	II
Proper Shipping Name	CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S
IMDG-Class	8
Subsidiary Hazard Class (Labels; EmS)	II
14.4 Packing group	II

15.0 Regulatory Information

15.1 Safety, health and environmental regulations/ Legislation for the substance or mixture	
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15.0 Regulatory Information

	Component
	WATER
EINECS	231-791-2
ELINCS	-
NLP	
TSCA	X
DSL	X
NDSL	-
PICCS	X
ENCS	X
CHINA	X
AICS	X
KECL	X

	Component
	1-Butanaminium, N,N,N- tributyl-hydroxide
EINECS	218-147-6
ELINCS	-
NLP	
TSCA	X
DSL	X
NDSL	-
PICCS	X
ENCS	X
CHINA	X
AICS	X
KECL	KE-34029X

TSCA	United States Toxic Substance Control Act 8 (b) Inventory
EINECS/ELINCS	European Inventory Lists
DSL/NDSL	Canadian Domestic Substances list/ Non-Domestic Substance list
PICCS	Philippines Inventory of chemicals and chemical substances
ENCS	Japan Existing and New chemical substances
CHINA	China Inventory of existing chemical substances
AICS	Inventory of chemical substances
KECL	Existing and evaluated chemical substances

16.0 Other information

Full text of R-Phrases referred to under section 2 and 3	
Symbols	C - Corrosive
Hazard Symbol / Category of Danger	Hazard Statements:
H314	Causes severe skin burns and eye damage

Hazard Symbol / Category of Danger

R35

Risk Phrases

Causes severe burns

Precautionary statements**Prevention**

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

Response

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P310: Immediately call a POISON CENTER or doctor/physician

P303+361+353: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower

Other information

This information is based upon Solumetrics Ltd Knowledge of this product at the time this Safety Data Sheet was prepared. It is given in good faith and no warranty is implied. The information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The user must satisfy him/her self as to the purpose this product is put to and the possible change in classification should this product be mixed or formulated with other compounds