



# 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**

<b>If Inhaled:</b>	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.
<b>In Case of Skin contact:</b>	Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes immediate medical attention is required
<b>In case of eye contact:</b>	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
<b>If Swallowed:</b>	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**

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

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

<b>Special protective equipment for fire-fighters:</b>	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**

<b>Personal Precautions:</b>	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**

<b>Advice on safe handling:</b>	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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<b>Hygiene measures:</b>	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**

<b>Requirements for storage area containers:</b>	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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<b>Advice on Protection Against fire and explosion:</b>	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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<b>Further information on storage conditions:</b>	Keep tightly closed in a dry and cool place. Keep in well ventilated place.
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<b>Advice on common storage:</b>	Keep away from food, drink and animal feeding stuffs.
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**8.0 Exposure controls/ personal protection****8.1 Control parameters**

<b>Exposure Limits</b>	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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<b>Derived No Effect Level (DNEL)</b>	No Data
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<b>Predicted No effect Concentration (PNEC)</b>	No Data
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**Exposure Control**

<b>Engineering Measures</b>	Ensure adequate ventilation, especially in confined areas Ensure that eyewash stations and showers are close to the workstation location
<b>Personal Protective Equipment</b>	
<b>Eye Protection</b>	Goggles
<b>Hand Protection</b>	Protective Gloves
<b>Skin and Body Protection</b>	Wear appropriate protective gloves and clothing to prevent skin exposure
<b>Respiratory Protection</b>	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
<b>Hygiene Measures</b>	Handle in accordance with good industrial hygiene and safety practice
<b>Environmental Exposure controls</b>	No Data

## 9.0 Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

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

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

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

## 12.0 Toxicity

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

## 13.0 Disposal considerations

### 13.1 Waste treatment methods

<b>Product</b>	Disposal together with normal waste is not allowed. Special disposal required to local regulations. Do not let product enter drains. Contact waste disposal services.
<b>Contaminated Packaging</b>	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.
<b>European Waste Catalogue Number</b>	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**

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

**15.0 Regulatory Information**

<b>15.1 Safety, health and environmental regulations/ Legislation for the substance or mixture</b>	
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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**

<b>Full text of R-Phrases referred to under section 2 and 3</b>	
<b>Symbols</b>	C - Corrosive
<b>Hazard Symbol / Category of Danger</b>	<b>Hazard Statements:</b> H314

**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**

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

**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