

Safety Data Sheet

#90029690 · Full 16-section SDS

According to Regulation (EC) No 1907/2006

According to Regulation (EC) No 2020/878

PRODUCT	CAS NUMBER	FORMULA	VERSION	REVISION DATE
Tetrabutylammonium hydroxide 20% solution in water N(CH₂CH₂CH₂CH₃)₄OH	2052- 49-5	C₁₆H₃₇NO	10	14 Aug 2026

SECTION 1

Identification

Product name	Tetrabutylammonium hydroxide 20% solution in water N(CH ₂ CH ₂ CH ₂ CH ₃) ₄ OH
CAS number	2052-49-5
Chemical formula	C ₁₆ H ₃₇ NO
Molecular weight	259.47
SMILES	CCCC[N+](CCCC)(CCCC)CCCC.[OH-]
EC / EINECS number	218-147-6
Recommended use & restrictions	For research and development. Laboratory chemicals. Manufacture of substances. Not suitable for human or veterinary purposes
Emergency telephone	0344 892 0111 — National Poisons Information Service (NPIS) (United Kingdom — for healthcare professionals (via TOXBASE))

SECTION 2

Hazard identification

**DANGER****CODE HAZARD STATEMENT****H290** May be corrosive to metals**H314 (sub
cat. 1B)** Causes severe skin burns and eye damage**CODE PRECAUTIONARY STATEMENT****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**P304+P340** IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing**P305+P351+P338** IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do, continue rinsing**P406** Store in a corrosive resistant container with a resistant inner liner**Other hazards (e.g. PBT / vPvB, not classified)** This product does not contain any substances classified as PBT or vPvB.

SECTION 3

Composition / information on ingredients

Purity / concentration c. 20% Tetrabutylammonium hydroxide (CAS: 2052-49-5)- H290, H314B
c. 80% Water (CAS: 7732-18-5)**Impurities / stabilising
additives** None

SECTION 4

First-aid measures

Inhalation	Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing.
Skin contact	Rinse immediately with plenty of water for at least 15 minutes and get medical attention.
Eye contact	Rinse immediately with plenty of water for at least 15 minutes; do not rub eye; remove contact lenses.
Ingestion	Rinse mouth thoroughly with water; give a few small glasses of water or milk to drink; get medical attention.
Symptoms / effects & medical attention	See Section 11.

SECTION 5

Fire-fighting measures

Suitable extinguishing media	For this substance/mixture no limitations of extinguishing agents are given.
Unsuitable extinguishing media	None known
Special hazards	Carbon oxides Nitrogen oxides (NOx) Carbon oxides Nitrogen oxides (NOx) Not combustible. Ambient fire may liberate hazardous vapours.
Advice for firefighters	Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing. Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system

SECTION 6

Accidental release measures

Personal precautions & PPE	Wear protective clothing as described in Section 8; avoid inhalation of vapours and contact with skin and eyes.
Environmental precautions	Avoid discharge to the aquatic environment; product may affect pH of water. Avoid discharge into drains, water courses or onto the ground.
Containment & clean-up methods	Absorb spillage with non-combustible, absorbent material; collect in suitable waste disposal containers; flush area with water.

For specific precautions, see Section 8 and Section 13.

SECTION 7

Handling & storage

Storage temperature	Ambient
Precautions for safe handling	Observe good chemical hygiene practices. Keep away from food, drink and animal feeding stuffs. Wash contaminated skin thoroughly after handling. Do not eat, drink or smoke when using this product. Remove contaminated clothing and laundry thoroughly before re-use. Wear protective clothing, gloves, eye and face protection. Avoid contact with skin and eyes. Do not breathe dust/fume/gas/mist/vapours/spray.
Conditions for safe storage (incompatibilities)	Store locked up. Keep only in the original container. Keep container tightly closed in a cool, well-ventilated place. Store away from strong acids. No metal containers.

SECTION 8

Exposure controls / personal protection

Occupational exposure limits (OEL / WEL)	<i>Not applicable</i>
DNEC/PNEC data	DNEC (Tetrabutylammonium hydroxide): Chronic effects systemic (Dermal): 1.4 mg/kg bw/day Chronic effects systemic (Inhalation): 4.93 mg/m ³ PNEC (Tetrabutylammonium hydroxide): Fresh water: 16.5 µg/L Fresh water sediment: 2.16 mg/kg sediment dw Water Intermittent: 0.165 mg/L Microorganisms in sewage treatment: 28.4 mg/L Soil (Agriculture): 0.421 mg/kg soil dw Marine water: 1.65 µg/L Marine water sediment: 0.216 mg/kg sediment dw Marine water intermittent: 16.5 µg/L
Eye / face protection	Safety glasses Wear eye/face protection as recommended. All eye/face protection should comply with EN ISO 16321-1:2022.
Skin / hand protection	Nitrile gloves Thickness: 0.11mm. Breakthrough time: 480mins.
Respiratory protection	Full-face respirator Keep self-contained breathing apparatus readily available for emergency use. Provide adequate ventilation. If ventilation is insufficient, suitable respiratory protection must be provided. Respiratory equipment: Reusable Air-Purifying Respirator (APR). Filter type: ABEK. Standard: EN 14387.

SECTION 9

Physical & chemical properties

Density (g/mL)	0.99 g/mL DERIVED FROM: LITERATURE
Flash point	Not applicable
Acidity	Base DERIVED FROM: LITERATURE
Appearance / physical state	Liquid DERIVED FROM: LITERATURE
Colour	Transparent DERIVED FROM: LITERATURE
Odour	Not known DERIVED FROM: LITERATURE
Melting / freezing point	Not applicable
Boiling point	Not applicable
Solubility (water)	Soluble in water. No data available DERIVED FROM: LITERATURE
pH	14 DERIVED FROM: LITERATURE
Vapour pressure	Not applicable
Partition coefficient (log Pow)	Not applicable
Auto-ignition / decomposition temp	Not applicable

SECTION 10

Stability & reactivity

Chemical stability / reactivity	Stable under recommended storage conditions.
Conditions to avoid	Avoid excessive heat.
Incompatible materials	Strong acids. Corrosive to Metal.
Hazardous decomposition products	See section 5

SECTION 11

Toxicological information

Acute toxicity (LD50 / LC50)	Information on hazard classes as defined in Regulation (EC) No 1272/2008 Tetrabutylammonium hydroxide LD50 (Oral) - Rat - 500 mg/kg Ref: External SDS
Skin corrosion / irritation	Causes severe burns
Eye corrosion / irritation	Causes serious eye damage
Respiratory / skin sensitisation	Not classified
Carcinogenicity	Not classified
Mutagenicity	Not classified
Reproductive toxicity	Not classified
STOT (single / repeated exposure)	Not classified
Aspiration hazard	Not classified
Endocrine disruptors	Not classified

SECTION 12

Ecological information

Aquatic toxicity	<i>Not applicable</i>
Persistence & degradability	<i>Not applicable</i>
Bioaccumulative potential	<i>Not applicable</i>
Mobility in soil	<i>Not applicable</i>
PBT / vPvB assessment	<i>Not applicable</i>

SECTION 13

Disposal considerations

Waste treatment / disposal methods	<i>Not applicable</i>
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SECTION 14

Transport information

UN number	UN3267
Proper shipping name	CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S.
Class	8
Packing group	II
Transport category	2
Tunnel code	(E)
Packing instruction (ADR)	P001
Packing instruction (IMDG)	P001
Environmental hazards	No
Special precautions for user	Always transport in closed containers that are upright and secure.



SECTION 15

Regulatory information

REACH code	Y110
UFI code	QE34-UF7F-DC8T-QJPV
ECHA notification	<i>Not applicable</i>
Chemical safety assessment carried out?	<i>Not applicable</i>

SECTION 16

Other information

Revision notes / other information	Revision 2, dated 02/02/2022. Hazard classification and labelling according to Regulation (EC) 1272/2008 All eye/face protection should comply with EN ISO 16321-1:2022 Respiratory equipment: Reusable air-purifying respirator (APR) Filter Type: ABEK Standard: EN 14387 National Regulations: -Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances Other regulations, limitations and legal regulations: -Directive 94/33/EC- The protection of young people at work
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