

TETRA(BUT-1-YL)AMMONIUM IODIDE

Page: 1 Compilation date: 22/05/2009 Revision date: 12/01/2023

Revision No: 3

### Section 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

Product name: TETRA(BUT-1-YL)AMMONIUM IODIDE

CAS number: 311-28-4

EINECS number: 206-220-5

Product code: OR10056

Synonyms: TBAI

#### TETRABUTYLAMMONIUM IODIDE

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: Apollo Scientific Itd

Units 3 & 4 Parkway Denton Manchester M34 3SG UK Tel: 01616411420 Email: alan.myers@apolloscientific.co.uk

#### 1.4. Emergency telephone number

Emergency tel: -

Section 2: Hazards identification

# 2.1. Classification of the substance or mixture

Classification under CLP: Acute Tox. 4: H302; STOT SE 3: H335; Eye Irrit. 2: H319; Skin Irrit. 2: H315

**Most important adverse effects:** Harmful if swallowed. Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation.

2.2. Label elements

Label elements:

Hazard statements: H302: Harmful if swallowed.

### TETRA(BUT-1-YL)AMMONIUM IODIDE

		Page:	2
	H315: Causes skin irritation.		
	H319: Causes serious eye irritation.		
	H335: May cause respiratory irritation.		
Hazard pictograms:	GHS07: Exclamation mark		
Signal words:	Warning		
Precautionary statements:	P261: Avoid breathing dust.		
	P271: Use only outdoors or in a well-ventilated area.		
	P280: Wear protective gloves/protective clothing/eye protection/face protection.		
2.3. Other hazards			
PBT:	This product is not identified as a PBT/vPvB substance.		
Section 3: Composition/information on ingredients			
3.1. Substances			
Chemical identity:	TETRA(BUT-1-YL)AMMONIUM IODIDE		
CAS number:	311-28-4		
EINECS number:	206-220-5		
Section 4: First aid measures			
4.1. Description of first aid measured	sures		
Skin contectu			

**Skin contact:** Remove all contaminated clothes and footwear immediately unless stuck to skin.

Drench the affected skin with running water for 10 minutes or longer if substance is still on skin. Consult a doctor.

- Eye contact: Bathe the eye with running water for 15 minutes. Consult a doctor.
- Ingestion: Wash out mouth with water. Do not induce vomiting. Consult a doctor.

**Inhalation:** Remove casualty from exposure ensuring one's own safety whilst doing so. Consult a doctor.

#### 4.2. Most important symptoms and effects, both acute and delayed

 Skin contact:
 There may be irritation and redness at the site of contact.

 Eye contact:
 There may be irritation and redness. The eyes may water profusely.

 Ingestion:
 There may be soreness and redness of the mouth and throat. Nausea and stomach pain may occur. There may be vomiting.

 Inhalation:
 There may be irritation of the throat with a feeling of tightness in the chest.

4.3. Indication of any immediate medical attention and special treatment needed

# TETRA(BUT-1-YL)AMMONIUM IODIDE

Page: 3

Section 5: Fire-fighting measures		
5.1. Extinguishing media		
Extinguishing media:	Carbon dioxide, dry chemical powder, foam. Suitable extinguishing media for the surrounding fire should be used.	
5.2. Special hazards arising from	n the substance or mixture	
Exposure hazards:	In combustion emits toxic fumes of carbon dioxide / carbon monoxide. Nitrogen oxides	
	(NOx). Hydrogen iodide (HI).	
5.3. Advice for fire-fighters		
Advice for fire-fighters:	Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes.	
Section 6: Accidental release m	easures	
6.1. Personal precautions, prote	ective equipment and emergency procedures	
<u>-</u>		
Personal precautions:	Refer to section 8 of SDS for personal protection details. If outside do not approach from downwind. If outside keep bystanders upwind and away from danger point. Mark out the	
	contaminated area with signs and prevent access to unauthorised personnel.	
6.2. Environmental precautions		
L		
	Do not discharge into drains or rivers.	
6.3. Methods and material for co	ontainment and cleaning up	
Clean-up procedures:	Transfer to a closable, labelled salvage container for disposal by an appropriate	
	method.	
6.4. Reference to other sections		
Section 7: Handling and storage		
7.1. Precautions for safe handlin	na	
Handling requirements:	Avoid direct contact with the substance. Ensure there is sufficient ventilation of the area.	
	Do not handle in a confined space. Avoid the formation or spread of dust in the air. Only use in fume hood.	
7.2. Conditions for safe storage		
Storage conditions:	Store in a cool, well ventilated area. Keep container tightly closed. Light Sensitive.	
	Product is hygroscopic. Take precautions to avoid contact with atmospheric moisture.	
Suitable neckering	Store under Argon.	
	Must only be kept in original packaging.	
7.3. Specific end use(s)		

Specific end use(s): No data available.

### TETRA(BUT-1-YL)AMMONIUM IODIDE

Page: 4

### Section 8: Exposure controls/personal protection

#### 8.1. Control parameters

Workplace exposure limits: No data available.

## **DNEL/PNEC** Values

DNEL / PNEC No data available.

#### 8.2. Exposure controls

Engineering measures:	Ensure there is sufficient ventilation of the area.
Respiratory protection:	Self-contained breathing apparatus must be available in case of emergency. Respiratory
	protective device with particle filter.
Hand protection:	Protective gloves.
Eye protection:	Safety glasses. Ensure eye bath is to hand.
Skin protection:	Protective clothing.

## Section 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

State:	Powder		
Colour:	White		
Evaporation rate:	No data available.		
Oxidising:	No data available.		
Solubility in water:	No data available.		
Viscosity:	No data available.		
Boiling point/range°C:	No data available.	Melting point/range°C:	142-148
Flammability limits %: lower:	No data available.	upper:	No data available.
Flash point°C:	No data available.	Part.coeff. n-octanol/water:	No data available.
Autoflammability°C:	No data available.	Vapour pressure:	No data available.
Relative density:	No data available.	pH:	No data available.
VOC g/l:	No data available.		

#### 9.2. Other information

Other information: No data available.

# Section 10: Stability and reactivity

10.1. Reactivity

**Reactivity:** Stable under recommended transport or storage conditions.

10.2. Chemical stability

Chemical stability: Stable under normal conditions.

#### TETRA(BUT-1-YL)AMMONIUM IODIDE

## 10.3. Possibility of hazardous reactions

Hazardous reactions: Hazardous reactions will not occur under normal transport or storage conditions.

#### 10.4. Conditions to avoid

Conditions to avoid: Heat. Light. Moist air. Humidity.

#### 10.5. Incompatible materials

Materials to avoid: Strong oxidising agents. Strong acids.

### 10.6. Hazardous decomposition products

Haz. decomp. products: In combustion emits toxic fumes of carbon dioxide / carbon monoxide.

### Section 11: Toxicological information

## 11.1. Information on toxicological effects

### Toxicity values:

Route	Species	Test	Value	Units
ORAL	RAT	LD50	1990	mg/kg

#### **Relevant hazards for product:**

Hazard	Route	Basis
Acute toxicity (ac. tox. 4)	ING	Hazardous: calculated
Skin corrosion/irritation	DRM	Hazardous: calculated
Serious eye damage/irritation	OPT	Hazardous: calculated
STOT-single exposure	INH	Hazardous: calculated

Symptoms / routes of exposure

Skin contact: There may be irritation and redness at the site of contact.

Eye contact: There may be irritation and redness. The eyes may water profusely.

**Ingestion:** There may be soreness and redness of the mouth and throat. Nausea and stomach pain may occur. There may be vomiting.

Inhalation: There may be irritation of the throat with a feeling of tightness in the chest.

## Section 12: Ecological information

#### 12.1. Toxicity

Ecotoxicity values: No data available.

#### 12.2. Persistence and degradability

Persistence and degradability: No data available.

### 12.3. Bioaccumulative potential

Bioaccumulative potential: No data available.

### TETRA(BUT-1-YL)AMMONIUM IODIDE

**Page:** 6

## 12.4. Mobility in soil

Mobility: No data available.

### 12.5. Results of PBT and vPvB assessment

#### PBT identification: This product is not identified as a PBT/vPvB substance.

#### 12.6. Other adverse effects

Other adverse effects: No data available.

### Section 13: Disposal considerations

#### 13.1. Waste treatment methods

**Disposal operations:** MATERIAL SHOULD BE DISPOSED OF IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS

**Disposal of packaging:** Dispose of as special waste in compliance with local and national regulations Observe all federal, state and local environmental regulations.

**NB:** The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

## Section 14: Transport information

Transport class: This product does not require a classification for transport.

# Section 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

#### 15.2. Chemical Safety Assessment

Chemical safety assessment: A chemical safety assessment has not been carried out for the substance or the mixture

by the supplier.

# Section 16: Other information

#### Other information

Other information:	This safety data sheet is prepared in accordance with Commission Regulation (EU) No
	2015/830.
	* Data predicted using computational software. The OECD QSAR-Toolbox for grouping
	chemicals into categories. Developed by LMC bulgaria.
	http://echa.europa.eu/support/oecd-qsar-toolbox
	~ Data predicted using computational software ACD/ToxSuite v 2.95.1 Copyright 1994-
	2009 ACD/labs, Copyright 2001-2009 Pharma Algorithms, Inc, Advanced Chemistry
	Development, Inc (ACD/Labs). http://www.acdlabs.com/products/pc_admet/tox/tox/
Phrases used in s.2 and s.3:	H302: Harmful if swallowed.
	H315: Causes skin irritation.
	H319: Causes serious eye irritation.
	H335: May cause respiratory irritation.

### TETRA(BUT-1-YL)AMMONIUM IODIDE

Legal disclaimer: .The material is intended for research purposes only and should be handled exclusively by those who have been fully trained in safety, laboratory and chemical handling procedures. The above information is believed to be correct to the best of our knowledge. The above information is believed to be correct to the best of our knowledge at the date of its publication, but should not be considered to be all inclusive. It should be used only as a guide for safe handling, storage, transportation and disposal. We cannot guarantee that the hazards detailed in this document are the only hazards that exist for this product. This is not a warranty and Apollo Scientific Ltd shall not be held liable for any damage resulting from handling or from contact with the above product.

#### Page: 7