

according to Regulation UK SI 2019/758 and UK SI 2020/1577 as amended

Creation Date 25-Sep-2014 Revision Date 06-Dec-2024 **Revision Number** 13

### SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THECOMPANY/UNDERTAKING

1.1. Product identifier

**Product Description:** Sodium tert-pentoxide, 30% solution in THF

390150000; 390151000; 390158000 Cat No.:

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

**Recommended Use** Laboratory chemicals. No Information available Uses advised against

1.3. Details of the supplier of the safety data sheet

Company

UK entity/business name

Fisher Scientific UK Bishop Meadow Road,

Loughborough, Leicestershire LE11 5RG, United Kingdom

EU entity/business name

Thermo Fisher Scientific

Janssen Pharmaceuticalaan 3a, 2440 Geel, Belgium

begel.sdsdesk@thermofisher.com E-mail address

1.4. Emergency telephone number

For information **US** call: 001-800-227-6701 / **Europe** call: +32 14 57 52 11 Emergency Number US:001-201-796-7100 / Europe: +32 14 57 52 99 CHEMTREC Tel. No. US:001-800-424-9300 / Europe:001-703-527-3887

### **SECTION 2: HAZARDS IDENTIFICATION**

#### 2.1. Classification of the substance or mixture

GHS Classification - According to GB-CLP Regulations UK SI 2019/720 and UK SI 2020/1567

**Physical hazards** 

Flammable liquids Category 2 (H225)

**Health hazards** 

Skin Corrosion/Irritation Category 1 B (H314) Serious Eye Damage/Eye Irritation Category 1 (H318) Carcinogenicity Category 2 (H351)

Specific target organ toxicity - (single exposure) Category 3 (H335) (H336)

#### **Environmental hazards**

Based on available data, the classification criteria are not met

Full text of Hazard Statements: see section 16

### 2.2. Label elements



### Signal Word

#### **Danger**

#### **Hazard Statements**

H225 - Highly flammable liquid and vapor

H314 - Causes severe skin burns and eye damage

H335 - May cause respiratory irritation

H336 - May cause drowsiness or dizziness

H351 - Suspected of causing cancer

EUH014 - Reacts violently with water

EUH019 - May form explosive peroxides

### **Precautionary Statements**

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking

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

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 or doctor/physician

#### 2.3. Other hazards

Reacts violently with water

Toxic to terrestrial vertebrates

This product does not contain any known or suspected endocrine disruptors

### **SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

### 3.2. Mixtures

Component	CAS No	EC No	Weight %	GHS Classification - According to GB-CLP Regulations UK SI 2019/720 and UK SI 2020/1567
Tetrahydrofuran	109-99-9	203-726-8	70	Flam. Liq. 2 (H225) Acute Tox. 4 (H302)
				Eye Irrit. 2 (H319)
				STOT SE 3 (H335)
				STOT SE 3 (H336)

### Sodium tert-pentoxide, 30% solution in THF

Revision	Date	06-Dec-2024

				Carc. 2 (H351) (EUH019)
2-Butanol, 2-methyl-, sodium salt	14593-46-5	EEC No. 238-639-4	30	Flam. Sol. 1 (H228)

Component	Specific concentration limits (SCL's)	M-Factor	Component notes
Tetrahydrofuran	Acute Tox. 4 :: C>82.5%	=	-
	Eye Irrit. 2 :: C>=25%		
	STOT SE 3 :: C>=25%		

Full text of Hazard Statements: see section 16

### **SECTION 4: FIRST AID MEASURES**

### 4.1. Description of first aid measures

**General Advice** Show this safety data sheet to the doctor in attendance. Immediate medical attention is

required.

**Eye Contact**Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

Immediate medical attention is required.

**Skin Contact** Wash off immediately with plenty of water for at least 15 minutes. Remove and wash

contaminated clothing and gloves, including the inside, before re-use. Call a physician

immediately.

**Ingestion** Do NOT induce vomiting. Clean mouth with water. Never give anything by mouth to an

unconscious person. Call a physician immediately.

**Inhalation** If not breathing, give artificial respiration. Remove from exposure, lie down. Do not use

mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory

medical device. Call a physician immediately.

Self-Protection of the First Aider Ensure that medical personnel are aware of the material(s) involved, take precautions to

protect themselves and prevent spread of contamination.

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

Causes burns by all exposure routes. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting: Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated: Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation: Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting: Causes central nervous system depression

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

Notes to Physician Treat symptomatically. Symptoms may be delayed.

ACR39015

Revision Date 06-Dec-2024

### **SECTION 5: FIREFIGHTING MEASURES**

#### 5.1. Extinguishing media

#### Suitable Extinguishing Media

Dry sand. Powder. Alcohol resistant foam. Cool closed containers exposed to fire with water spray.

#### Extinguishing media which must not be used for safety reasons

Water. Carbon dioxide (CO<sub>2</sub>). Foam. Do not use halon type extinguisher.

#### 5.2. Special hazards arising from the substance or mixture

Reacts violently with water. The product causes burns of eyes, skin and mucous membranes. Flammable. Containers may explode when heated. Vapors may form explosive mixtures with air. Vapors may travel to source of ignition and flash back. Thermal decomposition can lead to release of irritating gases and vapors.

#### **Hazardous Combustion Products**

Carbon monoxide (CO), Carbon dioxide (CO2).

### 5.3. Advice for firefighters

As in any fire, wear 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.

### **SECTION 6: ACCIDENTAL RELEASE MEASURES**

### 6.1. Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Use personal protective equipment as required. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. Remove all sources of ignition. Take precautionary measures against static discharges.

### 6.2. Environmental precautions

Should not be released into the environment.

### 6.3. Methods and material for containment and cleaning up

Soak up with inert absorbent material. Keep in suitable, closed containers for disposal. Do not expose spill to water. Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment.

### 6.4. Reference to other sections

Refer to protective measures listed in Sections 8 and 13.

### **SECTION 7: HANDLING AND STORAGE**

### 7.1. Precautions for safe handling

Wear personal protective equipment/face protection. Do not get in eyes, on skin, or on clothing. Use only under a chemical fume hood. Do not breathe mist/vapors/spray. Do not ingest. If swallowed then seek immediate medical assistance. Do not allow contact with water. If peroxide formation is suspected, do not open or move container. Keep away from open flames, hot surfaces and sources of ignition. Use only non-sparking tools. To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded. Take precautionary measures against static discharges.

#### **Hygiene Measures**

Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Do

\_\_\_\_\_

#### Sodium tert-pentoxide, 30% solution in THF

Revision Date 06-Dec-2024

not eat, drink or smoke when using this product. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Wash hands before breaks and after work.

#### 7.2. Conditions for safe storage, including any incompatibilities

Store under an inert atmosphere. Protect from moisture. Keep away from water or moist air. Keep away from heat, sparks and flame. Keep containers tightly closed in a dry, cool and well-ventilated place. Shelf life 12 months. May form explosive peroxides on prolonged storage. Containers should be dated when opened and tested periodically for the presence of peroxides. Should crystals form in a peroxidizable liquid, peroxidation may have occurred and the product should be considered extremely dangerous. In this instance, the container should only be opened remotely by professionals.

Technical Rules for Hazardous Substances (TRGS) 510 Storage Class (LGK) (Germany) Class 3

### 7.3. Specific end use(s)

Use in laboratories

### **SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

### 8.1. Control parameters

#### **Exposure limits**

List source(s): **EU** - Commission Directive (EU) 2019/1831 of 24 October 2019 establishing a fifth list of indicative occupational exposure limit values pursuant to Council Directive 98/24/EC and amending Commission Directive 2000/39/EC **UK** - EH40/2005 Work Exposure Limits, Fourth edition. Published 2020. **IRE** - 2021 Code of Practice for the Chemical Agents Regulations, Schedule 1. Published by the Health and Safety Authority

Component	The United Kingdom	European Union	Ireland
Tetrahydrofuran	STEL: 100 ppm 15 min	TWA: 50 ppm (8h)	TWA: 50 ppm 8 hr.
	STEL: 300 mg/m <sup>3</sup> 15 min	TWA: 150 mg/m <sup>3</sup> (8h)	TWA: 150 mg/m <sup>3</sup> 8 hr.
	TWA: 50 ppm 8 hr	STEL: 100 ppm (15min)	STEL: 100 ppm 15 min
	TWA: 150 mg/m <sup>3</sup> 8 hr	STEL: 300 mg/m <sup>3</sup> (15min)	STEL: 300 mg/m <sup>3</sup> 15 min
	Skin	Skin	Skin

### **Biological limit values**

List source(s):

### Derived No Effect Level (DNEL) / Derived Minimum Effect Level (DMEL)

See table for values

Component	Acute effects local (Dermal)	Acute effects systemic (Dermal)	Chronic effects local (Dermal)	Chronic effects systemic (Dermal)
Tetrahydrofuran 109-99-9 ( 70 )				DNEL = 12.6mg/kg bw/day

Component	Acute effects local (Inhalation)	Acute effects systemic (Inhalation)	Chronic effects local (Inhalation)	Chronic effects systemic (Inhalation)
Tetrahydrofuran 109-99-9 ( 70 )	DNEL = 300mg/m <sup>3</sup>	DNEL = 96mg/m <sup>3</sup>	DNEL = 150mg/m <sup>3</sup>	DNEL = 72.4mg/m <sup>3</sup>

### **Predicted No Effect Concentration (PNEC)**

See values below.

Component F	Fresh water Fresh water	Water Intermittent	Microorganisms in	Soil (Agriculture)
-------------	-------------------------	--------------------	-------------------	--------------------

#### Sodium tert-pentoxide, 30% solution in THF

		sediment		sewage treatment	
Tetrahydrofuran	PNEC = 4.32mg/L	PNEC = 23.3mg/kg	PNEC = 21.6mg/L	PNEC = 4.6mg/L	PNEC = 2.13mg/kg
109-99-9 ( 70 )		sediment dw			soil dw

Component	Marine water	Marine water sediment	Marine water intermittent	Food chain	Air
•	PNEC = 0.432mg/L	PNEC = 2.33mg/kg		PNEC = 67mg/kg	
109-99-9 ( 70 )		sediment dw		food	

#### 8.2. Exposure controls

#### **Engineering Measures**

Use only under a chemical fume hood. Use explosion-proof electrical/ventilating/lighting equipment. Ensure that eyewash stations and safety showers are close to the workstation location. Ensure adequate ventilation, especially in confined areas. Wherever possible, engineering control measures such as the isolation or enclosure of the process, the introduction of process or equipment changes to minimise release or contact, and the use of properly designed ventilation systems, should be adopted to control hazardous materials at source

Personal protective equipment

**Eye Protection** Goggles (European standard - EN 166)

Hand Protection Protective gloves

Glove material	Breakthrough time	Glove thickness	EU standard	Glove comments
Butyl rubber	See manufacturers	-	EN 374	(minimum requirement)
	recommendations			
Neoprene gloves				

Skin and body protection Long sleeved clothing.

Inspect gloves before use.

Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. (Refer to manufacturer/supplier for information)

Ensure gloves are suitable for the task: Chemical compatability, Dexterity, Operational conditions, User susceptibility, e.g. sensitisation effects, also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion.

Remove gloves with care avoiding skin contamination.

**Respiratory Protection** When workers are facing concentrations above the exposure limit they must use

appropriate certified respirators.

To protect the wearer, respiratory protective equipment must be the correct fit and be used

and maintained properly

Large scale/emergency use Use a NIOSH/MSHA or European Standard EN 136 approved respirator if exposure limits

are exceeded or if irritation or other symptoms are experienced

**Recommended Filter type:** low boiling organic solvent Type AX Brown conforming to EN371 or Organic gases and vapours filter Type A Brown conforming to EN14387

Small scale/Laboratory use Use a NIOSH/MSHA or European Standard EN 149:2001 approved respirator if exposure

limits are exceeded or if irritation or other symptoms are experienced.

Recommended half mask:- Valve filtering: EN405; or; Half mask: EN140; plus filter, EN

141

When RPE is used a face piece Fit Test should be conducted

**Environmental exposure controls** No information available.

### **SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

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

ACR39015

Revision Date 06-Dec-2024

Sodium tert-pentoxide, 30% solution in THF

**Physical State** Liquid

Dark yellow **Appearance** 

No information available Odor No data available **Odor Threshold** 

< 5 °C **Melting Point/Range** 

**Softening Point** No data available **Boiling Point/Range** 66 °C / 150.8 °F

Flammability (liquid) Highly flammable On basis of test data

Flammability (solid, gas) Not applicable Liquid **Explosion Limits Lower** 1.5% V

Upper 12% V

-21 °C / -5.8 °F

**Flash Point** Method - No information available

No data available **Autoignition Temperature Decomposition Temperature** No data available рΗ Not applicable **Viscosity** No data available

Water Solubility Reacts violently with water Solubility in other solvents No information available

Partition Coefficient (n-octanol/water)

log Pow Component Tetrahydrofuran 0.45

Vapor Pressure 23 hPa @ 20 °C

**Density / Specific Gravity** No data available 0.92 g/cm3

**Bulk Density** Not applicable Liquid **Vapor Density** No data available (Air = 1.0)

Particle characteristics Not applicable (liquid)

9.2. Other information

**Explosive Properties** Vapors may form explosive mixtures with air

### SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity Yes Reacts violently with water

10.2. Chemical stability

Water reactive. Moisture sensitive. Air sensitive. May form explosive peroxides.

10.3. Possibility of hazardous reactions

**Hazardous Polymerization** Hazardous polymerization does not occur.

**Hazardous Reactions** Reacts violently with water.

10.4. Conditions to avoid

Keep away from open flames, hot surfaces and sources of ignition. Incompatible products.

Exposure to moist air or water. Exposure to air. Exposure to moisture.

10.5. Incompatible materials

Acids.

10.6. Hazardous decomposition products

Carbon monoxide (CO). Carbon dioxide (CO2).

### **SECTION 11: TOXICOLOGICAL INFORMATION**

ACR39015

Revision Date 06-Dec-2024

#### Sodium tert-pentoxide, 30% solution in THF

Revision Date 06-Dec-2024

### 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

#### **Product Information**

(a) acute toxicity;

Oral Based on available data, the classification criteria are not met **Dermal** Based on available data, the classification criteria are not met Inhalation Based on available data, the classification criteria are not met

### Toxicology data for the components

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Tetrahydrofuran	1650 mg/kg ( Rat )	> 2000 mg/kg (Rabbit)	180 mg/L (Rat) 1 h
			53.9 mg/L (Rat) 4 h

(b) skin corrosion/irritation; Category 1 B

(c) serious eye damage/irritation; Category 1

(d) respiratory or skin sensitization;

Respiratory No data available

Based on available data, the classification criteria are not met Skin

Compon	ent 1	Test method	Test species	Study result
Tetrahydro	uran Local I	_ymph Node Assay	mouse	non-sensitising
109-99-9 (	70) OECD	Test Guideline 429		_

(e) germ cell mutagenicity; Based on available data, the classification criteria are not met

Component	Test method	Test species	Study result
Tetrahydrofuran	OECD Test Guideline 476	in vivo	negative
109-99-9 ( 70 )	Gene cell mutation	Mammalian	_
	OECD Test Guideline 473		
	Chromosomal aberration assay	in vitro	negative
		Mammalian	_

(f) carcinogenicity; Category 2

The table below indicates whether each agency has listed any ingredient as a carcinogen

Limited evidence of a carcinogenic effect

Component	EU	UK	Germany	IARC
Tetrahydrofuran				Group 2B

Based on available data, the classification criteria are not met (g) reproductive toxicity;

Component	Test method	Test species / Duration	Study result
Tetrahydrofuran	OECD Test Guideline 416	Rat	NOAEL = 3,000 ppm
109-99-9 ( 70 )		2 Generation	

(h) STOT-single exposure; Category 3

Respiratory system, Central nervous system (CNS). Results / Target organs

No data available (i) STOT-repeated exposure;

**Target Organs** No information available.

Sodium tert-pentoxide, 30% solution in THF

(j) aspiration hazard; No data available

delayed

Symptoms / effects,both acute and Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated. Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation. Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting. Causes central nervous system depression.

Revision Date 06-Dec-2024

#### 11.2. Information on other hazards

**Endocrine Disrupting Properties** 

Assess endocrine disrupting properties for human health. This product does not contain any known or suspected endocrine disruptors.

### **SECTION 12: ECOLOGICAL INFORMATION**

12.1. Toxicity

**Ecotoxicity effects** 

This product contains the following substance(s) which are hazardous for the environment. Reacts with water so no ecotoxicity data for the substance is available.

Component	Freshwater Fish	Water Flea	Freshwater Algae
Tetrahydrofuran	2160 mg/l LC50 = 96 h	EC50 48 h 3485 mg/l	
	Pimephales promelas	EC50: >10000 mg/L/24h	
	Leuciscus idus: LC50: 2820	_	
	mg/L/48h		

### 12.2. Persistence and degradability

**Persistence** 

Degradability

Persistence is unlikely, based on information available. Reacts with water.

Degradation in sewage treatment plant

Reacts violently with water.

12.3. Bioaccumulative potential

Bioaccumulation is unlikely

Component	log Pow	Bioconcentration factor (BCF)
Tetrahydrofuran	0.45	No data available

### 12.4. Mobility in soil

The product contains volatile organic compounds (VOC) which will evaporate easily from all surfaces Will likely be mobile in the environment due to its volatility. Disperses rapidly in

### 12.5. Results of PBT and vPvB

assessment

Reacts violently with water.

#### 12.6. Endocrine disrupting

properties

**Endocrine Disruptor Information** 

Component	EU - Endocrine Disrupters Candidate List	EU - Endocrine Disruptors - Evaluated
-		Substances
Tetrahydrofuran	Group III Chemical	

### 12.7. Other adverse effects

ACR39015

Sodium tert-pentoxide, 30% solution in THF

Revision Date 06-Dec-2024

Page 10/13

**Persistent Organic Pollutant Ozone Depletion Potential** 

This product does not contain any known or suspected substance This product does not contain any known or suspected substance

### **SECTION 13: DISPOSAL CONSIDERATIONS**

13.1. Waste treatment methods

Waste from Residues/Unused

**Products** 

Waste is classified as hazardous. Dispose of in accordance with the European Directives

on waste and hazardous waste. Dispose of in accordance with local regulations.

Dispose of this container to hazardous or special waste collection point. Empty containers **Contaminated Packaging** 

retain product residue, (liquid and/or vapor), and can be dangerous. Keep product and

empty container away from heat and sources of ignition.

**European Waste Catalogue (EWC)** According to the European Waste Catalog, Waste Codes are not product specific, but

application specific.

Other Information Do not flush to sewer. Waste codes should be assigned by the user based on the

application for which the product was used. Can be landfilled or incinerated, when in compliance with local regulations. Do not empty into drains. Large amounts will affect pH

and harm aquatic organisms.

### **SECTION 14: TRANSPORT INFORMATION**

### IMDG/IMO

14.1. UN number UN2924

14.2. UN proper shipping name Flammable liquid, corrosive, n.o.s.

**Technical Shipping Name** Tetrahydrofuran, 2-Butanol, 2-methyl-, sodium salt

14.3. Transport hazard class(es) **Subsidiary Hazard Class** 8 II 14.4. Packing group

ADR

UN2924 14.1. UN number

Flammable liquid, corrosive, n.o.s. 14.2. UN proper shipping name

**Technical Shipping Name** Tetrahydrofuran, 2-Butanol, 2-methyl-, sodium salt

14.3. Transport hazard class(es) 3 **Subsidiary Hazard Class** 8

14.4. Packing group II

IATA

14.1. UN number UN2924

14.2. UN proper shipping name Flammable liquid, corrosive, n.o.s.

**Technical Shipping Name** Tetrahydrofuran, 2-Butanol, 2-methyl-, sodium salt

14.3. Transport hazard class(es) 3 8 **Subsidiary Hazard Class** 14.4. Packing group II

No hazards identified 14.5. Environmental hazards

14.6. Special precautions for user No special precautions required.

Sodium tert-pentoxide, 30% solution in THF

Revision Date 06-Dec-2024

14.7. Maritime transport in bulk according to IMO instruments

Not applicable, packaged goods

### **SECTION 15: REGULATORY INFORMATION**

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

### **International Inventories**

Europe (EINECS/ELINCS/NLP), China (IECSC), Taiwan (TCSI), Korea (KECL), Japan (ENCS), Japan (ISHL), Canada (DSL/NDSL), Australia (AICS), New Zealand (NZIoC), Philippines (PICCS). US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710)

Component	CAS No	EINECS	ELINCS	NLP	IECSC	TCSI	KECL	ENCS	ISHL
Tetrahydrofuran	109-99-9	203-726-8	-	-	Х	X	KE-33454	X	Χ
2-Butanol, 2-methyl-, sodium salt	14593-46-5	238-639-4	-	-	Х	X	2015-3-70	Х	Χ
							10		

Component	CAS No	TSCA	TSCA Inventory notification - Active-Inactive	DSL	NDSL	AICS	NZIoC	PICCS
Tetrahydrofuran	109-99-9	X	ACTIVE	X	Ī	X	Х	X
2-Butanol, 2-methyl-, sodium salt	14593-46-5	Х	ACTIVE	•	Χ	Χ	-	-

Legend: X - Listed '-' - Not Listed

**KECL** - NIER number or KE number (http://ncis.nier.go.kr/en/main.do)

### Authorisation/Restrictions according to EU REACH

Component	CAS No	REACH (1907/2006) -	REACH (1907/2006) -	REACH Regulation (EC
			Annex XVII - Restrictions	
		Subject to Authorization	on Certain Dangerous	Candidate List of
			Substances	Substances of Very High
				Concern (SVHC)
Tetrahydrofuran	109-99-9	-	Use restricted. See entry	-
			75.	
			(see link for restriction	
			details)	
2-Butanol, 2-methyl-, sodium salt	14593-46-5	-	-	-

### **REACH links**

https://echa.europa.eu/substances-restricted-under-reach

### Seveso III Directive (2012/18/EC)

Component	CAS No	Seveso III Directive (2012/18/EC) -	Seveso III Directive (2012/18/EC) -
		Qualifying Quantities for Major Accident	Qualifying Quantities for Safety Report
		Notification	Requirements
Tetrahydrofuran	109-99-9	Not applicable	Not applicable
2-Butanol, 2-methyl-, sodium	14593-46-5	Not applicable	Not applicable
salt			

Regulation (EC) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of dangerous chemicals

Not applicable

Contains component(s) that meet a 'definition' of per & poly fluoroalkyl substance (PFAS)? Not applicable

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work .

#### Sodium tert-pentoxide, 30% solution in THF

Revision Date 06-Dec-2024

Take note of Directive 2000/39/EC establishing a first list of indicative occupational exposure limit values

### **National Regulations**

UK - Take note of Control of Substances Hazardous to Health Regulations (COSHH) 2002 and 2005 Amendment

#### **WGK Classification**

Water endangering class = 1 (self classification)

Component	Germany - Water Classification (AwSV)	Germany - TA-Luft Class
Tetrahydrofuran	WGK1	
2-Butanol, 2-methyl-, sodium salt	WGK1	

Component	France - INRS (Tables of occupational diseases)	
Tetrahydrofuran	Tableaux des maladies professionnelles (TMP) - RG 84	

Component	Switzerland - Ordinance on the Reduction of Risk from handling of hazardous substances preparation (SR 814.81)	Switzerland - Ordinance on Incentive Taxes on Volatile Organic Compounds (OVOC)	Switzerland - Ordinance of the Rotterdam Convention on the Prior Informed Consent Procedure
Tetrahydrofuran 109-99-9 ( 70 )		Group I	

### 15.2. Chemical safety assessment

Chemical Safety Assessment/Reports (CSA/CSR) are not required for mixtures

### **SECTION 16: OTHER INFORMATION**

### Full text of H-Statements referred to under sections 2 and 3

H225 - Highly flammable liquid and vapor

H228 - Flammable solid

H251 - Self-heating; may catch fire

H302 - Harmful if swallowed

H312 - Harmful in contact with skin

H314 - Causes severe skin burns and eye damage

H318 - Causes serious eye damage

H319 - Causes serious eye irritation

H332 - Harmful if inhaled

H335 - May cause respiratory irritation

H336 - May cause drowsiness or dizziness

H351 - Suspected of causing cancer

EUH014 - Reacts violently with water

EUH019 - May form explosive peroxides

### Legend

**CAS** - Chemical Abstracts Service

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

Page 12/13

EINECS/ELINCS - European Inventory of Existing Commercial Chemical DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances/EU List of Notified Chemical Substances

Substances List

PICCS - Philippines Inventory of Chemicals and Chemical Substances

**ENCS** - Japanese Existing and New Chemical Substances AICS - Australian Inventory of Chemical Substances

**IECSC** - Chinese Inventory of Existing Chemical Substances

NZIoC - New Zealand Inventory of Chemicals

**KECL** - Korean Existing and Evaluated Chemical Substances

TWA - Time Weighted Average

LD50 - Lethal Dose 50%

Transport Association

ATE - Acute Toxicity Estimate

VOC - (Volatile Organic Compound)

IARC - International Agency for Research on Cancer

ICAO/IATA - International Civil Aviation Organization/International Air

MARPOL - International Convention for the Prevention of Pollution from

Predicted No Effect Concentration (PNEC)

#### Sodium tert-pentoxide, 30% solution in THF

Revision Date 06-Dec-2024

WEL - Workplace Exposure Limit

ACGIH - American Conference of Governmental Industrial Hygienists

**DNEL** - Derived No Effect Level

RPE - Respiratory Protective Equipment LC50 - Lethal Concentration 50%

PBT - Persistent, Bioaccumulative, Toxic

EC50 - Effective Concentration 50% NOEC - No Observed Effect Concentration POW - Partition coefficient Octanol:Water vPvB - very Persistent, very Bioaccumulative

ADR - European Agreement Concerning the International Carriage of

Dangerous Goods by Road

IMO/IMDG - International Maritime Organization/International Maritime

Dangerous Goods Code

**OECD** - Organisation for Economic Co-operation and Development

**BCF** - Bioconcentration factor

Key literature references and sources for data

https://echa.europa.eu/information-on-chemicals

Suppliers safety data sheet, Chemadvisor - LOLI, Merck index, RTECS

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

**Physical hazards** On basis of test data **Health Hazards** Calculation method **Environmental hazards** Calculation method

**Training Advice** 

Chemical hazard awareness training, incorporating labelling, Safety Data Sheets (SDS), Personal Protective Equipment (PPE) and hygiene.

Use of personal protective equipment, covering appropriate selection, compatibility, breakthrough thresholds, care, maintenance, fit and standards.

First aid for chemical exposure, including the use of eye wash and safety showers.

Fire prevention and fighting, identifying hazards and risks, static electricity, explosive atmospheres posed by vapours and dusts. Chemical incident response training.

**Creation Date** 25-Sep-2014 **Revision Date** 06-Dec-2024

SDS sections updated, 5, 7, 10. **Revision Summary** 

### This safety data sheet complies with Regulation UK SI 2019/758 and UK SI 2020/1577 as amended.

**Disclaimer** 

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

## **End of Safety Data Sheet**