# Thermo Fisher SCIENTIFIC

# SAFETY DATA SHEET

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ALFAAJ62552

# TRIS, 0.5M buffer solution, pH 8.0

## SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

产品说明: TRIS, 0.5M 缓冲溶液., pH 8.0 Product Description: TRIS, 0.5M buffer solution, pH 8.0

Cat No.: J62552

Supplier Avocado Research Chemicals Ltd.

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E-mail address begel.sdsdesk@thermofisher.com

Recommended Use Laboratory chemicals.
Uses advised against No Information available

# **SECTION 2. HAZARD IDENTIFICATION**

Physical State Appearance Odor

Liquid No information available No information available

**Emergency Overview** 

The product contains no substances which at their given concentration are considered to be hazardous to health.

## Classification of the substance or mixture

Based on available data, the classification criteria are not met

#### **Label Elements**

None required

#### Storage

P403 - Store in a well-ventilated place

## **Disposal**

P501 - Dispose of contents/ container to an approved waste disposal plant

# **Physical and Chemical Hazards**

None identified.

#### **Health Hazards**

The product contains no substances which at their given concentration are considered to be hazardous to health.

#### **Environmental hazards**

Contains no substances known to be hazardous to the environment or not degradable in waste water treatment plants. Is not likely

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mobile in the environment due its low water solubility. Spillage unlikely to penetrate soil.

This product does not contain any known or suspected endocrine disruptors.

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

Component	CAS No	Weight %		
Water	7732-18-5	94		
Tris (hydroxymethyl) aminomethane	77-86-1	6		

# **SECTION 4. FIRST AID MEASURES**

## **Eye Contact**

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.

#### Skin Contact

Wash off immediately with plenty of water for at least 15 minutes. Get medical attention immediately if symptoms occur.

#### Inhalation

Remove to fresh air. Get medical attention immediately if symptoms occur.

#### Ingestion

Clean mouth with water and drink afterwards plenty of water. Get medical attention if symptoms occur.

#### Most important symptoms and effects

None reasonably foreseeable.

# Self-Protection of the First Aider

No special precautions required.

## **Notes to Physician**

Treat symptomatically.

#### **SECTION 5. FIRE-FIGHTING MEASURES**

#### **Suitable Extinguishing Media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

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

No information available.

# **Specific Hazards Arising from the Chemical**

Thermal decomposition can lead to release of irritating gases and vapors.

# **Protective Equipment and Precautions for Firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

# **SECTION 6. ACCIDENTAL RELEASE MEASURES**

#### **Personal Precautions**

Ensure adequate ventilation. Use personal protective equipment as required.

## **Environmental Precautions**

Should not be released into the environment. See Section 12 for additional Ecological Information.

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Methods for Containment and Clean Up

Sweep up and shovel into suitable containers for disposal.

Refer to protective measures listed in Sections 8 and 13.

## **SECTION 7. HANDLING AND STORAGE**

#### Handling

Wear personal protective equipment/face protection. Ensure adequate ventilation. Avoid contact with skin, eyes or clothing. Avoid ingestion and inhalation.

#### Storage

Keep container tightly closed in a dry and well-ventilated place.

#### Specific Use(s)

Use in laboratories

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

#### **Control Parameters**

## **Exposure Controls**

## **Engineering Measures**

None under normal use conditions. .

#### Personal protective equipment

**Eye Protection** Wear safety glasses with side shields (or goggles) (European standard - EN 166)

Hand Protection Protective gloves

Glove material Natural rubber Nitrile rubber	Breakthrough time See manufacturers recommendations	Glove thickness	EU standard EN 374	Glove comments (minimum requirement)
Neoprene				
PVC				

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.

Skin and body protection Long sleeved clothing

**Respiratory Protection** No protective equipment is needed under normal use conditions.

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: Particle filter

Small scale/Laboratory use Maintain adequate ventilation

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice.

Method - No information available

Liquid

Liquid

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**Environmental exposure controls** No information available.

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

**Appearance** 

**Physical State** Liquid

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

**Melting Point/Range** No data available **Softening Point** No data available **Boiling Point/Range** No information available Flash Point No information available

No data available

**Evaporation Rate** Flammability (solid,gas) Not applicable

No data available **Explosion Limits** 

**Vapor Pressure** No data available

**Vapor Density** No data available (Air = 1.0)

Specific Gravity / Density No data available **Bulk Density** Not applicable

Water Solubility Immiscible

No information available Solubility in other solvents

Partition Coefficient (n-octanol/water)

**Autoignition Temperature** No data available No data available **Decomposition Temperature** Viscosity No data available **Explosive Properties** No information available **Oxidizing Properties** No information available

# **SECTION 10. STABILITY AND REACTIVITY**

Stability Stable under normal conditions.

**Hazardous Reactions** None under normal processing. No information available. **Hazardous Polymerization** 

**Conditions to Avoid** None known.

No information available. Materials to avoid

Hazardous Decomposition Products None under normal use conditions.

# **SECTION 11. TOXICOLOGICAL INFORMATION**

#### **Product Information**

(a) acute toxicity;

Toxicology data for the components

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Water	-	-	-
Tris (hydroxymethyl) aminomethane	LD50 = 5900 mg/kg (Rat)	LD50 > 5000 mg/kg (Rat)	

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(b) skin corrosion/irritation; No data available

(c) serious eye damage/irritation; No data available

(d) respiratory or skin sensitization;

Respiratory No data available Skin No data available

(e) germ cell mutagenicity; No data available

(f) carcinogenicity; No data available

There are no known carcinogenic chemicals in this product

(g) reproductive toxicity; No data available

(h) STOT-single exposure; No data available

(i) STOT-repeated exposure; No data available

Target Organs No information available.

(j) aspiration hazard; No data available

Symptoms / effects,both acute and No information available

delayed

# **SECTION 12. ECOLOGICAL INFORMATION**

Ecotoxicity effects .

Persistence and Degradability

Persistence Immiscible with water.

Bioaccumulative Potential May have some potential to bioaccumulate

Mobility in soil Spillage unlikely to penetrate soil Is not likely mobile in the environment due its low water

solubility

Endocrine Disruptor Information Persistent Organic Pollutant

Ozone Depletion Potential

This product does not contain any known or suspected endocrine disruptors

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

#### **SECTION 13. DISPOSAL CONSIDERATIONS**

Waste from Residues/Unused Products

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Consult local, regional, and national hazardous waste regulations to

ensure complete and accurate classification.

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**Contaminated Packaging** Empty remaining contents. Dispose of in accordance with local regulations. Do not re-use

empty containers.

Other Information Waste codes should be assigned by the user based on the application for which the product

was used.

#### **SECTION 14. TRANSPORT INFORMATION**

**Road and Rail Transport** Not Regulated

IMDG/IMO Not regulated

IATA Not regulated

**Special Precautions for User** No special precautions required

# **SECTION 15. REGULATORY INFORMATION**

#### **International Inventories**

X = listed, China (IECSC), Europe (EINECS/ELINCS/NLP), U.S.A. (TSCA), Canada (DSL/NDSL), Philippines (PICCS), Japan (ENCS), Japan (ISHL), Australia (AICS), Korea (KECL).

Component	The Inventory of Hazardous Chemicals (2015 Edition)	goods GB	TCSI	IECSC	EINECS	TSCA	DSL	PICCS	ENCS	ISHL	AICS	KECL
Water	-	-	X	Х	231-791-2	Х	X	Х	Х		Х	KE-35400
Tris (hydroxymethyl) aminomethane	-	-	Х	Х	201-064-4	Х	Х	Х	Х	Х	Х	KE-01403

## **National Regulations**

## **SECTION 16. OTHER INFORMATION**

Prepared By Health, Safety and Environmental Department

**Revision Date** 09-May-2024

**Revision Summary** New emergency telephone response service provider.

**Training Advice** 

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

#### Legend

**CAS** - Chemical Abstracts Service TSCA - United States Toxic Substances Control Act Section 8(b)

Inventory

Substances/EU List of Notified Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

IECSC - Chinese Inventory of Existing Chemical Substances

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

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

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

NZIoC - New Zealand Inventory of Chemicals

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WEL - Workplace Exposure Limit

**ACGIH** - American Conference of Governmental Industrial Hygienists

**DNEL** - Derived No Effect Level

RPE - Respiratory Protective Equipment

LC50 - Lethal Concentration 50%

NOEC - No Observed Effect Concentration PBT - Persistent, Bioaccumulative, Toxic

ICAO/IATA - International Civil Aviation Organization/International Air **Transport Association** 

ADR - European Agreement Concerning the International Carriage of Dangerous Goods by Road

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

**BCF** - Bioconcentration factor

IMO/IMDG - International Maritime Organization/International Maritime

Dangerous Goods Code

LD50 - Lethal Dose 50%

MARPOL - International Convention for the Prevention of Pollution from

Ships

ATE - Acute Toxicity Estimate

TWA - Time Weighted Average

EC50 - Effective Concentration 50%

IARC - International Agency for Research on Cancer

PNEC - Predicted No Effect Concentration

POW - Partition coefficient Octanol:Water

vPvB - very Persistent, very Bioaccumulative

VOC - (Volatile Organic Compound)

# Key literature references and sources for data

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

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

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

#### Disclaimer

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**End of Safety Data Sheet**