

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

Creation Date 25-Mar-2010 Revision Date 13-Oct-2023 Revision Number 6

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

1.1. Product identifier

Product Description: Sureprep TrueTotal RNA Purification Kit, Wash solution

Cat No. : BP2800-4B; BP2800-50B

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

Recommended Use Laboratory chemicals.
Uses advised against No Information available

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

E-mail address begel.sdsdesk@thermofisher.com

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

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

# **Physical hazards**

Based on available data, the classification criteria are not met

#### **Health hazards**

Based on available data, the classification criteria are not met

#### **Environmental hazards**

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Based on available data, the classification criteria are not met

Full text of Hazard Statements: see section 16

#### 2.2. Label elements

None required

#### 2.3. Other hazards

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 %  | CLP Classification - According to<br>GB-CLP Regulations UK SI 2019/720 and<br>UK SI 2020/1567 |
|---|-----------|-------------------|-----------|---|
| Tris (hydroxymethyl) aminomethane       | 77-86-1   | 201-064-4         | 1.0 - 2.0 | -   |
| Ethylenediamine tetraacetic acid (EDTA) | 60-00-4   | EEC No. 200-449-4 | < 1.0     | Eye Irrit. 2 (H319)<br>Acute Tox. 4 (H332)<br>STOT RE 2 (H373)                                |
| Nuclease Free Water                     | 7732-18-5 | EEC No. 231-791-2 | 98 - 99   | -   |

Full text of Hazard Statements: see section 16

# **SECTION 4: FIRST AID MEASURES**

#### 4.1. Description of 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.

**Ingestion** Clean mouth with water and drink afterwards plenty of water. Get medical attention if

symptoms occur.

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

**Self-Protection of the First Aider** No special precautions required.

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

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None reasonably foreseeable.

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

Notes to Physician Treat symptomatically.

# **SECTION 5: FIREFIGHTING MEASURES**

# 5.1. Extinguishing media

#### Suitable Extinguishing Media

Substance is nonflammable; use agent most appropriate to extinguish surrounding fire.

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

No information available.

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

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

#### **Hazardous Combustion Products**

None under normal use conditions.

# 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.

# **SECTION 6: ACCIDENTAL RELEASE MEASURES**

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

Use personal protective equipment as required. Ensure adequate ventilation.

#### 6.2. Environmental precautions

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

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

Sweep up and shovel into suitable containers for disposal.

#### 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. Ensure adequate ventilation. Avoid contact with skin, eyes or clothing. Avoid ingestion and inhalation.

#### **Hygiene Measures**

Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing and gloves, including the inside, before

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re-use. Wash hands before breaks and after work.

# 7.2. Conditions for safe storage, including any incompatibilities

Keep containers tightly closed in a dry, cool and well-ventilated place.

Technical Rules for Hazardous Substances (TRGS) 510 Class 12 Storage Class (LGK) (Germany)

#### 7.3. Specific end use(s)

Use in laboratories

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

## 8.1. Control parameters

#### **Exposure limits**

List source(s):

### **Biological limit values**

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies

# 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) |
|-----------------------|------------------------------|---------------------------------|--------------------------------|-----------------------------------|
| Tris (hydroxymethyl)  |                              |                                 |                                | DNEL = 166.7mg/kg                 |
| aminomethane          |                              |                                 |                                | bw/day                            |
| 77-86-1 ( 1.0 - 2.0 ) |                              |                                 |                                | _                                 |

| Component   | Acute effects local (Inhalation) | Acute effects systemic (Inhalation) | Chronic effects local (Inhalation) | Chronic effects systemic (Inhalation) |
|---|----------------------------------|-------------------------------------|------------------------------------|---------------------------------------|
| Tris (hydroxymethyl)<br>aminomethane<br>77-86-1 ( 1.0 - 2.0 )   |                                  |                                     |                                    | DNEL = 117.5mg/m <sup>3</sup>         |
| Ethylenediamine tetraacetic<br>acid (EDTA)<br>60-00-4 ( < 1.0 ) | DNEL = 3mg/m <sup>3</sup>        |                                     | DNEL = 1.5mg/m <sup>3</sup>        |                                       |

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

See values below.

| Component   | Fresh water    | Fresh water sediment | Water Intermittent | Microorganisms in<br>sewage treatment | Soil (Agriculture)          |
|---|----------------|----------------------|--------------------|---------------------------------------|-----------------------------|
| Tris (hydroxymethyl)<br>aminomethane<br>77-86-1 (1.0 - 2.0)     |                |                      |                    | PNEC = 300mg/L                        |                             |
| Ethylenediamine<br>tetraacetic acid (EDTA)<br>60-00-4 ( < 1.0 ) | PNEC = 2.2mg/L |                      | PNEC = 1.2mg/L     | PNEC = 43mg/L                         | PNEC = 0.72mg/kg<br>soil dw |

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| Component   | Marine water    | Marine water sediment | Marine water intermittent | Food chain | Air |
|---|-----------------|-----------------------|---------------------------|------------|-----|
| Ethylenediamine<br>tetraacetic acid (EDTA)<br>60-00-4 ( < 1.0 ) | PNEC = 0.22mg/L |                       |                           |            |     |

#### 8.2. Exposure controls

### **Engineering Measures**

Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location.

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 Neoprene | Breakthrough time<br>See manufacturers<br>recommendations | Glove thickness<br>- | EU standard<br>EN 374 | Glove comments<br>(minimum requirement) |
|---|---|----------------------|-----------------------|---|
| PVC   |   |                      |                       |   |

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** 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

**Environmental exposure controls** No information available.

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

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

Physical State Liquid

Appearance Clear Colorless

Odor
Odor No information available
Odor Threshold No data available
Melting Point/Range No data available
Softening Point No data available
Boiling Point/Range No information available

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Flammability (liquid) No data available

Flammability (solid,gas) Not applicable Liquid

Explosion Limits No data available

Flash Point Not applicable Method - No information available

Autoignition Temperature No data available

Decomposition Temperature No data available

pH 9

Viscosity No data available

Water Solubility Miscible

Solubility in other solvents No information available

Partition Coefficient (n-octanol/water)

Vapor Pressure
Density / Specific Gravity
No data available
No data available
Not applicable

Bulk DensityNot applicableLiquidVapor DensityNo data available(Air = 1.0)

Particle characteristics Not applicable (liquid)

9.2. Other information

# **SECTION 10: STABILITY AND REACTIVITY**

10.1. Reactivity

None known, based on information available

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

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

10.4. Conditions to avoid

Excess heat.

10.5. Incompatible materials

None known.

10.6. Hazardous decomposition products

None under normal use conditions.

# **SECTION 11: TOXICOLOGICAL INFORMATION**

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

**Product Information**No acute toxicity information is available for this product

(a) acute toxicity;

OralBased on available data, the classification criteria are not metDermalBased on available data, the classification criteria are not metInhalationBased on available data, the classification criteria are not met

Toxicology data for the components

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| Component                               | LD50 Oral               | LD50 Dermal             | LC50 Inhalation |
|---|-------------------------|-------------------------|-----------------|
| Tris (hydroxymethyl) aminomethane       | LD50 = 5900 mg/kg (Rat) | LD50 > 5000 mg/kg (Rat) | -               |
|   |                         |                         |                 |
| Ethylenediamine tetraacetic acid (EDTA) | 4500 mg/kg (Rat)        | =                       | 1 mg/l (rat)    |
| , , ,                                   | >2000 mg/kg ( Rat )     |                         | - , ,           |
| Nuclease Free Water                     | LD50 > 90 mL/kg (Rat)   | <del>-</del>            | <del>-</del>    |
|   | • , ,                   |                         |                 |

(b) skin corrosion/irritation; No data available

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

(d) respiratory or skin sensitization;

No data available Respiratory Skin No data available

No data available (e) germ cell mutagenicity;

No data available (f) carcinogenicity;

There are no known carcinogenic chemicals in this product

No data available (g) reproductive toxicity;

No data available (h) STOT-single exposure;

(i) STOT-repeated exposure; No data available

**Target Organs** None known.

(j) aspiration hazard; No data available

Symptoms / effects,both acute and No information available. delayed

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** 

| Component                               | Freshwater Fish  | Water Flea                                      | Freshwater Algae                                    |
|---|--|---|---|
| Ethylenediamine tetraacetic acid (EDTA) | LC50: 34 - 62 mg/L, 96h static<br>(Lepomis macrochirus)<br>LC50: 44.2 - 76.5 mg/L, 96h<br>static (Pimephales promelas) | EC50: = 113 mg/L, 48h Static<br>(Daphnia magna) | EC50: = 1.01 mg/L, 72h<br>(Desmodesmus subspicatus) |

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12.2. Persistence and degradability

**Persistence** Miscible with water, Persistence is unlikely, based on information available.

12.3. Bioaccumulative potential Bioaccumulation is unlikely

12.4. Mobility in soil

The product is water soluble, and may spread in water systems. Will likely be mobile in the

environment due to its water solubility. Highly mobile in soils

12.5. Results of PBT and vPvB

assessment

No data available for assessment.

12.6. Endocrine disrupting

properties

Endocrine Disruptor Information This product does not contain any known or suspected endocrine disruptors

12.7. Other adverse effects

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** 

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

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

empty containers.

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

application specific.

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

was used.

# **SECTION 14: TRANSPORT INFORMATION**

IMDG/IMO Not regulated

14.1. UN number

14.2. UN proper shipping name

14.3. Transport hazard class(es)

14.4. Packing group

ADR Not regulated

14.1. UN number

14.2. UN proper shipping name

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14.3. Transport hazard class(es)

14.4. Packing group

<u>IATA</u> Not regulated

14.1. UN number

14.2. UN proper shipping name

14.3. Transport hazard class(es)

14.4. Packing group

14.5. Environmental hazards No hazards identified

**14.6. Special precautions for user** No special precautions required.

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**

X = listed. US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710)

| Component                        | CAS No    | EINECS    | ELINCS | NLP | IECSC | TCSI | KECL     | ENCS | ISHL |
|----------------------------------|-----------|-----------|--------|-----|-------|------|----------|------|------|
| Tris (hydroxymethyl)             | 77-86-1   | 201-064-4 | -      | -   | X     | X    | KE-01403 | Χ    | X    |
| aminomethane                     |           |           |        |     |       |      |          |      |      |
| Ethylenediamine tetraacetic acid | 60-00-4   | 200-449-4 | -      | -   | X     | Х    | KE-13648 | Х    | Х    |
| (EDTA)                           |           |           |        |     |       |      |          |      |      |
| Nuclease Free Water              | 7732-18-5 | 231-791-2 | -      | -   | Χ     | Х    | KE-35400 | Χ    | -    |

| Component                               | CAS No    | TSCA | TSCA Inventory<br>notification -<br>Active-Inactive | DSL | NDSL | AICS | NZIoC | PICCS |
|---|-----------|------|---|-----|------|------|-------|-------|
| Tris (hydroxymethyl) aminomethane       | 77-86-1   | X    | ACTIVE  | Х   | 1    | X    | Х     | X     |
| Ethylenediamine tetraacetic acid (EDTA) | 60-00-4   | X    | ACTIVE  | X   | -    | X    | X     | X     |
| Nuclease Free Water                     | 7732-18-5 | Х    | ACTIVE  | Х   | -    | Χ    | Х     | Х     |

**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) -<br>Annex XIV - Substances<br>Subject to Authorization |  | REACH Regulation (EC<br>1907/2006) article 59 -<br>Candidate List of<br>Substances of Very High<br>Concern (SVHC) |
|---|-----------|---|--|---|
| Tris (hydroxymethyl) aminomethane       | 77-86-1   | -   | -  | -   |
| Ethylenediamine tetraacetic acid (EDTA) | 60-00-4   | -   | Use restricted. See item<br>75.<br>(see link for restriction<br>details) | -   |
| Nuclease Free Water                     | 7732-18-5 | -   | -  | -   |

#### **REACH links**

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

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

| Component                               | CAS No    | Seveso III Directive (2012/18/EC) -<br>Qualifying Quantities for Major Accident<br>Notification | Seveso III Directive (2012/18/EC) -<br>Qualifying Quantities for Safety Report<br>Requirements |
|---|-----------|---|--|
| Tris (hydroxymethyl) aminomethane       | 77-86-1   | Not applicable  | Not applicable   |
| Ethylenediamine tetraacetic acid (EDTA) | 60-00-4   | Not applicable  | Not applicable   |
| Nuclease Free Water                     | 7732-18-5 | Not applicable  | Not applicable   |

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 .

#### **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 |
|---|---------------------------------------|-------------------------|
| Tris (hydroxymethyl) aminomethane       | WGK1                                  |                         |
| Ethylenediamine tetraacetic acid (EDTA) | WGK2                                  |                         |

| Component                               | Switzerland - Ordinance on the<br>Reduction of Risk from<br>handling of hazardous<br>substances preparation (SR<br>814.81) | Switzerland - Ordinance on<br>Incentive Taxes on Volatile<br>Organic Compounds (OVOC) | Switzerland - Ordinance of the<br>Rotterdam Convention on the<br>Prior Informed Consent<br>Procedure |
|---|--|---|--|
| Ethylenediamine tetraacetic acid (EDTA) | Prohibited and Restricted  |   |  |
| 60-00-4 ( < 1.0 )                       | Substances   |   |  |

## 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

H319 - Causes serious eye irritation

H332 - Harmful if inhaled

H373 - May cause damage to organs through prolonged or repeated exposure

Legend

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**CAS** - Chemical Abstracts Service

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

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

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

NZIoC - New Zealand Inventory of Chemicals

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

TWA - Time Weighted Average

IARC - International Agency for Research on Cancer

Predicted No Effect Concentration (PNEC)

LD50 - Lethal Dose 50%

EC50 - Effective Concentration 50% 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

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

MARPOL - International Convention for the Prevention of Pollution from

Ships

ATE - Acute Toxicity Estimate 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

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

On basis of test data Physical hazards **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.

**Creation Date** 25-Mar-2010 **Revision Date** 13-Oct-2023

**Revision Summary** SDS sections updated.

# 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**

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