

Safety Data Sheet

according to Regulation (EU) 2015/830

Version: 2.0

Date of issue: 17/09/2010 Revision date: 25/10/2017

Supersedes 11/03/2014

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

### 1.1. Product identifier

Product form : Substance

Trade name : Bis-Tris buffer grade

 EC-No.
 : 230-237-7

 CAS-No.
 : 6976-37-0

 Product code
 : B1516

 Formula
 : C8H19NO5

Synonyms : 2-[bis(2-hydroxyethyl)amino]-2-(hydroxymethyl)propane-1,3-diol

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

#### 1.2.1. Relevant identified uses

No additional information available

### 1.2.2. Uses advised against

No additional information available

### 1.3. Details of the supplier of the safety data sheet

Duchefa Biochemie B.V.
A. Hofmanweg 71
2031 BH Haarlem - The Netherlands
T +31(0)23-5319093 - F +31(0)23-5318027
info@duchefa.nl

## 1.4. Emergency telephone number

Emergency number : Supplier contact information:

+31(0)23-5319093 (M-F 09:00-17:00) +31(0)6-30109355 (outside office hours)

SDS Ref.: B1516

 Organisation/Company
 Address
 Comment

 World Health Organization world directory of poison centres
 http://apps.who.int/poisoncentres/
 Consult website for a local poison centre

## **SECTION 2: Hazards identification**

### 2.1. Classification of the substance or mixture

### Classification according to Regulation (EC) No. 1272/2008 [CLP]

Skin corrosion/irritation, Category 2 H315
Serious eye damage/eye irritation, Category 2 H319
Specific target organ toxicity — Single exposure, Category 3, H335

Respiratory tract irritation

Full text of hazard classes and H-statements : see section 16

### Adverse physicochemical, human health and environmental effects

No additional information available

Safety Data Sheet

according to Regulation (EU) 2015/830

#### 2.2. Label elements

# Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS07

Signal word (CLP) : Warning

Hazard statements (CLP) : H315 - Causes skin irritation

H319 - Causes serious eye irritation. H335 - May cause respiratory irritation.

Precautionary statements (CLP) : P280 - Wear protective gloves, protective clothing, face protection, eye

protection.

P302+P352 - IF ON SKIN: Wash with plenty of water.

P305+P351 - IF IN EYES: Rinse cautiously with water for several minutes.

SDS Ref.: B1516

#### 2.3. Other hazards

No additional information available

# SECTION 3: Composition/information on ingredients

### 3.1. Substances

Name : Bis-Tris buffer grade

CAS-No. : 6976-37-0 EC-No. : 230-237-7

Name	Product identifier	%
Bis-Tris buffer grade	(CAS-No.) 6976-37-0	>= 99
	(EC-No.) 230-237-7	

Full text of H-statements: see section 16

#### 3.2. Mixtures

Not applicable

# **SECTION 4: First aid measures**

## 4.1. Description of first aid measures

First-aid measures after inhalation : Assure fresh air breathing. Call a doctor.

First-aid measures after skin contact : Remove affected clothing and wash all exposed skin area with mild soap

and water, followed by warm water rinse.

First-aid measures after eye contact : Immediately rinse with water for a prolonged period while holding the eyelids

wide open. Get medical advice/attention.

First-aid measures after ingestion : Rinse mouth out with water. Get medical advice/attention.

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

Symptoms/effects : Tears. Redness, pain.

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

No additional information available

Safety Data Sheet

according to Regulation (EU) 2015/830

## **SECTION 5: Firefighting measures**

## 5.1. Extinguishing media

Suitable extinguishing media : All extinguishing media can be used.

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

Hazardous decomposition products in : Under fire conditions, hazardous fumes will be present. COx. NOx.

case of fire

5.3. Advice for firefighters

Protection during firefighting : Do not enter fire area without proper protective equipment, including

respiratory protection.

## **SECTION 6: Accidental release measures**

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

General measures : Spill should be handled by trained cleaning personnel properly equipped

with respiratory and eye protection.

### 6.1.1. For non-emergency personnel

Protective equipment : Wear recommended personal protective equipment.

### 6.1.2. For emergency responders

No additional information available

## 6.2. Environmental precautions

Prevent entry to sewers and public waters. Avoid release to the environment.

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

Methods for cleaning up : Sweep up dry powder and dispose properly.

#### 6.4. Reference to other sections

No additional information available

## **SECTION 7: Handling and storage**

### 7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station.

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

Storage conditions : Keep container closed when not in use. Store in dry, well-ventilated area.

Store at room temperature.

## 7.3. Specific end use(s)

For professional use only. Duchefa Biochemie B.V. products are intended only for "in vitro laboratory" research purposes.

## **SECTION 8: Exposure controls/personal protection**

## 8.1. Control parameters

No additional information available

### 8.2. Exposure controls

### Hand protection:

# Safety Data Sheet

according to Regulation (EU) 2015/830

Туре	Material	Permeation	Thickness (mm)	Standard
Gloves	Nitrile rubber (NBR)	6 (> 480 minutes)	0,11	EN 374

### Eye protection:

Safety glasses

### Skin and body protection:

Wear suitable protective clothing

### Respiratory protection:

filter type P2 (EN 143)

# SECTION 9: Physical and chemical properties

## 9.1. Information on basic physical and chemical properties

Physical state : Solid

Appearance : Crystals. Powder.

Molecular mass : 209,2 g/mol

Colour : White.

Odour : No data available
Odour threshold : No data available
pH : No data available

pH solution : 9,5 - 11 (209,2 g/l 25°C)

Relative evaporation rate : No data available

(butylacetate=1)

Solubility

: 102 - 110 °C Melting point : No data available Freezing point : No data available **Boiling** point : No data available Flash point Auto-ignition temperature : No data available : No data available Decomposition temperature Flammability (solid, gas) : No data available Vapour pressure : No data available Relative vapour density at 20 °C : No data available Relative density : No data available

Log Pow : No data available
Viscosity, kinematic : No data available
Viscosity, dynamic : No data available
Explosive properties : No data available
Oxidising properties : No data available
Explosive limits : No data available

#### 9.2. Other information

No additional information available

25/10/2017 Duchefa Biochemie B.V. EN (English) SDS Ref.: B1516 4/8

: Soluble in water.

Safety Data Sheet

according to Regulation (EU) 2015/830

# SECTION 10: Stability and reactivity

### 10.1. Reactivity

No additional information available

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

No additional information available

#### 10.4. Conditions to avoid

Water, humidity.

## 10.5. Incompatible materials

Strong oxidizers. Strong acids.

### 10.6. Hazardous decomposition products

When heated to decomposition, emits dangerous fumes. COx. NOx.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity : Not classified

Skin corrosion/irritation : Causes skin irritation.

Serious eye damage/irritation : Causes serious eye irritation.

Respiratory or skin sensitisation : Not classified Germ cell mutagenicity : Not classified Carcinogenicity : Not classified

Reproductive toxicity : Not classified

STOT-single exposure : May cause respiratory irritation.

STOT-repeated exposure : Not classified

Aspiration hazard : Not classified

# **SECTION 12: Ecological information**

### 12.1. Toxicity

No additional information available

## 12.2. Persistence and degradability

No additional information available

### 12.3. Bioaccumulative potential

No additional information available

### 12.4. Mobility in soil

No additional information available

#### 12.5. Results of PBT and vPvB assessment

No additional information available

Safety Data Sheet

according to Regulation (EU) 2015/830

#### 12.6. Other adverse effects

Additional information : Avoid release to the environment. Prevent entry to sewers and public waters

# **SECTION 13: Disposal considerations**

### 13.1. Waste treatment methods

Waste treatment methods : Dispose in a safe manner in accordance with local/national regulations.

# **SECTION 14: Transport information**

In accordance with ADR / IATA / IMDG

ADR	IMDG	IATA	
14.1. UN number			
Not applicable	Not applicable	Not applicable	
14.2. UN proper shipping name	14.2. UN proper shipping name		
Not applicable	Not applicable	Not applicable	
Not applicable	Not applicable	Not applicable	
14.3. Transport hazard class(es)			
Not applicable	Not applicable	Not applicable	
Not applicable	Not applicable	Not applicable	
14.4. Packing group			
Not applicable	Not applicable	Not applicable	
14.5. Environmental hazards			
Not applicable	Not applicable	Not applicable	
No supplementary information available			

### 14.6. Special precautions for user

### . Overland transport

Not applicable

## - Transport by sea

Not applicable

## - Air transport

Not applicable

## 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

# **SECTION 15: Regulatory information**

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

## 15.1.1. EU-Regulations

No REACH Annex XVII restrictions

Bis-Tris buffer grade is not on the REACH Candidate List

Bis-Tris buffer grade is not on the REACH Annex XIV List

## 15.1.2. National regulations

### Germany

## Safety Data Sheet

according to Regulation (EU) 2015/830

12th Ordinance Implementing the Federal Immission Control Act -12.BlmSchV

: Is not subject of the 12. BlmSchV (Hazardous Incident Ordinance)

#### **Netherlands**

SZW-lijst van kankerverwekkende

stoffen

SZW-lijst van mutagene stoffen NIET-limitatieve lijst van voor de voortplanting giftige stoffen -

Borstvoeding NIET-limitatieve lijst van voor de voortplanting giftige stoffen -

Vruchtbaarheid NIET-limitatieve lijst van voor de

voortplanting giftige stoffen -Ontwikkeling

: The substance is not listed

**Denmark** 

Recommendations Danish Regulation : Young people below the age of 18 years are not allowed to use the product

## **Chemical safety assessment**

No additional information available

## **SECTION 16: Other information**

### Indication of changes:

1.4	Emergency number	Modified	
2	Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]	Removed	Obsolete
8.2	Hand protection	Modified	Specified material, thickness, et cetera of gloves

## Abbreviations and acronyms:

ATE	Acute Toxicity Estimate
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
BCF	Bioconcentration factor
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
DPD	Dangerous Preparations Directive 1999/45/EC
DSD	Dangerous Substances Directive 67/548/EEC
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
PBT	Persistent Bioaccumulative Toxic
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
SDS	Safety Data Sheet

Data sources

: ECHA (European Chemicals Agency). Supplier. REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

# Safety Data Sheet

according to Regulation (EU) 2015/830

### Full text of H- and EUH-statements:

Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Skin Irrit. 2	Skin corrosion/irritation, Category 2
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
H315	Causes skin irritation
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.

## SDS Biochemicals version 2017

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product

 25/10/2017 Duchefa Biochemie B.V.
 EN (English)
 SDS Ref.: B1516
 8/8