

# **SAFETY DATA SHEET**

according to Regulation (EC) No. 1907/2006

Version 6.13 Revision Date 22.03.2024 Print Date 06.05.2024

GENERIC EU MSDS - NO COUNTRY SPECIFIC DATA - NO OEL DATA

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

#### 1.1 Product identifiers

Product name : Trypan Blue solution

Product Number : T8154 Brand : Sigma

UFI : XT32-S60M-U99E-J5SK

REACH No. : This product is a mixture. REACH Registration Number see

section 3.

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

Identified uses : Laboratory chemicals, Manufacture of substances Uses advised against : This product is not intended for consumer use.

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

Company : Sigma-Aldrich Chemie GmbH

Eschenstrasse 5

D-82024 TAUFKIRCHEN

Telephone : +49 (0)89 6513-1130Fax : +49 (0)89 6513-1161

E-mail address : technischerservice@merckgroup.com

#### 1.4 Emergency telephone

Emergency Phone # : 0800 181 7059 (CHEMTREC Deutschland)

+49 (0)696 43508409 (CHEMTREC

weltweit)

# **SECTION 2: Hazards identification**

#### 2.1 Classification of the substance or mixture

Carcinogenicity, (Category 1B) H350: May cause cancer.

# 2.2 Label elements

Labelling according Regulation (EC) No 1272/2008

Sigma- T8154 Page 1 of 10



#### Pictogram



Signal Word Danger

**Hazard Statements** 

H350 May cause cancer.

**Precautionary Statements** 

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and

understood.

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

protection.

P308 + P313 IF exposed or concerned: Get medical advice/ attention.

P405 Store locked up.

P501 Dispose of contents/ container to an approved waste disposal

plant.

Supplemental Hazard

Statements

none

Restricted to professional users.

#### 2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

## Ecological information:

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher. Toxicological information:

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

## **SECTION 3: Composition/information on ingredients**

## 3.2 Mixtures

Formula : C34H24N6Na4O14S4

Molecular weight : 960,81 g/mol

Component		Classification	Concentration
3,3'-dimethyl-4,4'-bis(5-amino-4-hydroxy-2,7-disulphonaphthyl-3-azo)-[1,1'-biphenyl] tetrasodium salt			
CAS-No. EC-No. Index-No.	72-57-1 200-786-7 611-024-00-1 *	Carc. 1B; H350	>= 0,1 - < 1 %

Sigma- T8154 Page 2 of 10



\*A registration number is not available for this substance as the substance or its use are exempted from registration according to Article 2 REACH Regulation (EC) No 1907/2006, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.

For the full text of the H-Statements mentioned in this Section, see Section 16.

#### **SECTION 4: First aid measures**

#### 4.1 Description of first-aid measures

No data available

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

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

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

No data available

## **SECTION 5: Firefighting measures**

### 5.1 Extinguishing media

No data available

## 5.2 Special hazards arising from the substance or mixture

Nature of decomposition products not known.

Not combustible.

#### 5.3 Advice for firefighters

No data available

#### 5.4 Further information

No data available

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

## 6.1 Personal precautions, protective equipment and emergency procedures

For personal protection see section 8.

#### 6.2 Environmental precautions

No data available

## 6.3 Methods and materials for containment and cleaning up

No data available

#### 6.4 Reference to other sections

For disposal see section 13.

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

# 7.1 Precautions for safe handling

For precautions see section 2.2.

Sigma- T8154 Page 3 of 10



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

No data available

## 7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

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

#### 8.1 Control parameters

Ingredients with workplace control parameters

#### 8.2 Exposure controls

#### Personal protective equipment

## **Skin protection**

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

The selected protective gloves have to satisfy the specifications of Regulation (EU) 2016/425 and the standard EN 374 derived from it.

Full contact

Material: Nitrile rubber

Minimum layer thickness: 0,11 mm Break through time: 480 min

Material tested: Dermatril® (KCL 740 / Aldrich Z677272, Size M)

Splash contact

Material: Nitrile rubber

Minimum layer thickness: 0,11 mm Break through time: 480 min

Material tested: Dermatril® (KCL 740 / Aldrich Z677272, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail

sales@kcl.de, test method: EN374

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the EC approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

#### **Control of environmental exposure**

Prevent product from entering drains.

Sigma- T8154 Page 4 of 10



## **SECTION 9: Physical and chemical properties**

# 9.1 Information on basic physical and chemical properties

liquid a) Physical state b) Color dark blue No data available c) Odor No data available d) Melting point/freezing point No data available e) Initial boiling point and boiling range Flammability (solid, No data available f) gas) No data available g) Upper/lower flammability or explosive limits h) Flash point No data available Autoignition Not applicable i) temperature Decomposition No data available j) temperature k) pH 7,1 - 7,57,1 - 7,5 at 100% Viscosity, kinematic: No data available I) Viscosity Viscosity, dynamic: No data available m) Water solubility at 20 °C soluble n) Partition coefficient: No data available n-octanol/water No data available o) Vapor pressure No data available p) Density Relative density No data available q) Relative vapor No data available density r) Particle No data available characteristics

s) Explosive properties Not classified as explosive.

t) Oxidizing properties none

#### 9.2 Other safety information

No data available

Sigma- T8154 Page 5 of 10



## **SECTION 10: Stability and reactivity**

#### 10.1 Reactivity

No data available

#### 10.2 Chemical stability

No data available

## 10.3 Possibility of hazardous reactions

No data available

#### 10.4 Conditions to avoid

No data available

#### 10.5 Incompatible materials

Strong oxidizing agents

#### 10.6 Hazardous decomposition products

In the event of fire: see section 5

## **SECTION 11: Toxicological information**

#### 11.1 Information on toxicological effects

#### **Mixture**

#### **Acute toxicity**

Oral: No data available Inhalation: No data available Dermal: No data available

## **Skin corrosion/irritation** Remarks: No data available

#### Serious eye damage/eye irritation

Remarks: No data available

#### Respiratory or skin sensitization

No data available

## Germ cell mutagenicity

No data available

# Carcinogenicity

Possible carcinogen.

#### Reproductive toxicity

No data available

#### Specific target organ toxicity - single exposure

No data available

#### Specific target organ toxicity - repeated exposure

No data available

## **Aspiration hazard**

No data available

Sigma- T8154 Page 6 of 10

A

#### 11.2 Additional Information

## **Endocrine disrupting properties**

#### **Product:**

Assessment The substance/mixture does not contain

components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Other dangerous properties can not be excluded.

This substance should be handled with particular care.

## **Components**

# 3,3'-dimethyl-4,4'-bis(5-amino-4-hydroxy-2,7-disulphonaphthyl-3-azo)-[1,1'-biphenyl] tetrasodium salt

#### **Acute toxicity**

LD50 Oral - Rat - 6.200 mg/kg

Remarks: (RTECS)

Inhalation: No data available Dermal: No data available

#### Skin corrosion/irritation

No data available

## Serious eye damage/eye irritation

No data available

#### Respiratory or skin sensitization

No data available

#### **Germ cell mutagenicity**

Species: Rat

Remarks: Unscheduled DNA synthesis

#### Carcinogenicity

Presumed to have carcinogenic potential for humans

#### Reproductive toxicity

No data available

#### Specific target organ toxicity - single exposure

No data available

# Specific target organ toxicity - repeated exposure

No data available

## **Aspiration hazard**

No data available

Sigma- T8154 Page 7 of 10

A

## **SECTION 12: Ecological information**

#### 12.1 Toxicity

#### **Mixture**

No data available

#### 12.2 Persistence and degradability

No data available

#### 12.3 Bioaccumulative potential

No data available

#### 12.4 Mobility in soil

No data available

#### 12.5 Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

# 12.6 Endocrine disrupting properties

#### Product:

Assessment : The substance/mixture does not contain components

considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

#### 12.7 Other adverse effects

No data available

#### Components

# 3,3'-dimethyl-4,4'-bis(5-amino-4-hydroxy-2,7-disulphonaphthyl-3-azo)-[1,1'-biphenyl] tetrasodium salt

Toxicity to fish  $LC50 - Oryzias \ latipes - > 1.000 \ mg/l - 48 \ h$ 

## **SECTION 13: Disposal considerations**

#### 13.1 Waste treatment methods

No data available

## **SECTION 14: Transport information**

#### 14.1 UN number

ADR/RID: - IMDG: - IATA: -

Sigma- T8154 Page 8 of 10



#### 14.2 UN proper shipping name

ADR/RID: Not dangerous goods IMDG: Not dangerous goods IATA: Not dangerous goods

# 14.3 Transport hazard class(es)

ADR/RID: - IMDG: - IATA: -

14.4 Packaging group

ADR/RID: - IMDG: - IATA: -

14.5 Environmental hazards

ADR/RID: no IMDG Marine pollutant: no IATA: no

#### 14.6 Special precautions for user

No data available **Further information** 

Not classified as dangerous in the meaning of transport regulations.

#### **SECTION 15: Regulatory information**

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

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006.

#### **Authorisations and/or restrictions on use**

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII)

: 3,3'-dimethyl-4,4'-bis(5-amino-4-hydroxy-2,7-disulphonaphthyl-3-azo)-[1,1'-biphenyl] tetrasodium salt

# 15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out

# **SECTION 16: Other information**

#### **Full text of H-Statements**

H350 May cause cancer.

Sigma- T8154 Page 9 of 10



#### Full text of other abbreviations

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIC - Australian Inventory of Industrial Chemicals; ASTM -American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS -Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx -Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS -Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

#### **Classification of the mixture**

#### **Classification procedure:**

Carc.1B H350

Calculation method

The branding on the header and/or footer of this document may temporarily not visually match the product purchased as we transition our branding. However, all of the information in the document regarding the product remains unchanged and matches the product ordered. For further information please contact mlsbranding@sial.com.

Sigma- T8154 Page 10 of 10

