

MATERIAL SAFETY DATA SHEET

Trypan Blue Dye

VERSION NO.: 1.0
MSDS DATE: 18 JAN 2019

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Trypan Blue Dye
PRODUCT CODES: Components 1 of 1 , CD-TRY-1.5 or CD-TRY-0.25

MANUFACTURER: DeNovix Inc.
ADDRESS: 3411 Silverside Road
Hanby Building 101
Wilmington, DE 19810

PHONE: 1-302-442-6911

PRODUCT USE: For research use only
PREPARED BY: DeNovix Inc.

SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

Mixtures

COMPONENT Tetrasodium 3,3'-[(3,3'-dimethyl[1,1'-biphenyl]-4,4'-diyl)bis(azo)]bis[5-amino-4-hydroxynaphthalene-2,7-disulphonate]

CLASSIFICATION Carc. 1B; H350

CAS NO. 72-57-1

EC NO. 200-786-7

Formula C₃₄H₂₄N₆Na₄O₁₄S₄

Molecular Weight 960.81 g/mol

Concentration <0.1 – 1.0 %

SECTION 3: HAZARDS IDENTIFICATION

CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)
Carcinogenicity (Category 2), H351

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

GHS Label elements, including precautionary statements

HAZARD PICTOGRAM



SIGNAL WORD Warning
HAZARD STATEMENT H351 Suspected of causing cancer.

Precautionary statement(s)

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.

Hazards not otherwise classified (HNOC) or not covered by GHS - none

HMIS CLASSIFICATION:

HEALTH HAZARD 0
FLAMMABILITY *
PHYSICAL HAZARDS 0

NFPA RATING:

HEALTH HAZARDS 0
FIRE 0
REACTIVITY HAZARDS 0

MATERIAL SAFETY DATA SHEET

Trypan Blue Dye

VERSION NO.: 1.0
MSDS DATE: 18 JAN 2019

SECTION 4: FIRST AID MEASURES

GENERAL ADVICE:

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area. Remove affected clothing and launder before reuse.

IF INHALED:

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

IN CASE OF SKIN CONTACT

Wash off with soap and plenty of water. Consult a physician.

IN CASE OF EYE CONTACT:

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

IF SWALLOWED

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

SECTION 5: FIRE-FIGHTING MEASURES

SUITABLE EXTINGUISHING MEDIA

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE

No data available

ADVICE FOR FIREFIGHTERS

Wear self-contained breathing apparatus for firefighting if necessary.

FURTHER INFORMATION

No data available

SECTION 6: ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS

Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Avoid breathing dust. Remove all sources of ignition.

ENVIRONMENTAL PRECAUTIONS

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP

Contain spillage. Soak up spilled substance with inert absorbent material. Keep in suitable, closed containers for disposal.

REFERENCE TO OTHER SECTIONS

For disposal see section 13.

SECTION 7: HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING

Avoid contact with skin and eyes. Avoid inhalation of vapor or mist. Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

CONDITIONS FOR SAFE STORAGE

Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

APPROPRIATE ENGINEERING CONTROLS

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

PERSONAL PROTECTIVE EQUIPMENT EYE/FACE PROTECTION

Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

MATERIAL SAFETY DATA SHEET

Trypan Blue Dye

VERSION NO.: 1.0
MSDS DATE: 18 JAN 2019

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.

Full contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm Break through time: 480 min

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

Splash contact Material: Nitrile rubber

Minimum layer thickness: 0.11 mm Break through time: 480 min

Material tested: Dermatrill® (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 CE 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.

BODY PROTECTION

Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

RESPIRATORY PROTECTION

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

CONTROL OF ENVIRONMENTAL EXPOSURE

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Form: liquid
Odour	No data available
Odour Threshold	No data available
pH	No data available
Melting point/freezing point	No data available
Initial boiling point and boiling range	No data available
Flash point	No data available
Evaporation rate	No data available
Flammability (solid, gas)	No data available
Upper/lower flammability or explosive limits	No data available
Vapour pressure	No data available
Vapour density	No data available
Relative density	No data available
Water solubility	No data available
Partition coefficient: n- octanol/water	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity	No data available
Explosive properties	No data available
Oxidizing properties	No data available

OTHER SAFETY INFORMATION

No data available

SECTION 10: STABILITY AND REACTIVITY

REACTIVITY

No data available

MATERIAL SAFETY DATA SHEET

Trypan Blue Dye

VERSION NO.: 1.0
MSDS DATE: 18 JAN 2019

CHEMICAL STABILITY

Stable under recommended storage conditions.

POSSIBILITY OF HAZARDOUS REACTIONS

No data available

CONDITIONS TO AVOID

No data available

INCOMPATIBLE MATERIALS

Strong oxidizing agents

HAZARDOUS DECOMPOSITION PRODUCTS

Hazardous decomposition products formed under fire conditions. - Nature of decomposition products not known. Other decomposition products - No data available
In the event of fire: see section 5

SECTION 11: TOXICOLOGICAL INFORMATION

TOXICOLOGICAL INFORMATION:

ACUTE TOXICITY

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

SKIN CORROSION/IRRITATION

No data available

SERIOUS EYE DAMAGE/EYE IRRITATION

No information available

RESPIRATORY OR SKIN SENSITATION

No information available

GERM CELL MUTAGENICITY

No information available

CARCINOGENICITY:

IARC: 2B - Group 2B: Possibly carcinogenic to humans (Tetrasodium 3,3'-[(3,3'-dimethyl[1,1'-biphenyl]-4,4'-diyl)bis(azo)]bis[5-amino-4-hydroxynaphthalene-2,7-disulphonate])

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

REPRODUCTIVE TOXICITY

No data available

TERATOGENICITY

No data available

SPECIFIC TARGET ORGAN TOXICITY - single exposure (Globally Harmonized System)

No data available

SPECIFIC TARGET ORGAN TOXICITY - repeated exposure (Globally Harmonized System)

No data available

ASPIRATION HAZARD

No data available

ADDITIONAL INFORMATION

RTECS: Not available

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. Liver - Irregularities - Based on Human Evidence

Liver - Irregularities - Based on Human Evidence (Tetrasodium 3,3'-[(3,3'-dimethyl[1,1'-biphenyl]-4,4'-diyl)bis(azo)]bis[5-amino-4-hydroxynaphthalene-2,7-disulphonate])

SECTION 12: ECOLOGICAL INFORMATION

TOXICITY

No data available

PERSISTENCE AND DEGRADABILITY

No data available

BIOACCUMULATIVE POTENTIAL

No data available

MOBILITY IN SOIL

No data available

PBT and vPvB ASSESSMENT

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

OTHER ADVERSE EFFECTS

No data available

MATERIAL SAFETY DATA SHEET

Trypan Blue Dye

VERSION NO.: 1.0
MSDS DATE: 18 JAN 2019

SECTION 13: DISPOSAL CONSIDERATIONS

WASTE TREATMENT METHODS PRODUCT

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

CONTAMINATED PACKAGING

Dispose of as unused product.

SECTION 14: TRANSPORT INFORMATION

DOT (US)	Not dangerous goods
IMDG	Not dangerous goods
IATA	Not dangerous goods

SECTION 15: REGULATORY INFORMATION

OSHA HAZARDS	No data available
SARA 302 COMPONENTS	SARA 302: No chemicals found.
SARA 313 COMPONENTS	The following components are subject to reporting levels established by SARA Title III, Section 313: Tetrasodium 3,3'-[(3,3'-dimethyl[1,1'-biphenyl]-4,4'-diyl)bis(azo)]bis[5-amino-4-hydroxynaphthalene-2,7-disulphonate] CAS-No. 72-57-1, Revision Date 2007-07-01

SARA 311/312 HAZARDS

Acute Health Hazard - No
Chronic Health Hazard - Yes
Fire Hazard - No
Sudden Release of Pressure Hazard - No
Reactive Hazard - No

MASSACHUSETTS RIGHT TO KNOW COMPONENTS

Tetrasodium 3,3'-[(3,3'-dimethyl[1,1'-biphenyl]-4,4'-diyl)bis(azo)]bis[5-amino-4-hydroxynaphthalene-2,7-disulphonate]	CAS-No.: 72-57-1	Revision date 2007-07-01
---	------------------	--------------------------

PENNSYLVANIA RIGHT TO KNOW COMPONENTS

WATER	CAS-No.: 7732-18-5	
TETRASODIUM 3,3'-[(3,3'-DIMETHYL[1,1'-BIPHENYL]-4,4'-DIYL)BIS(AZO)]BIS[5-AMINO-4-HYDROXYNAPHTHALENE-2,7-DISULPHONATE]	CAS-No.: 72-57-1	Revision date 2007-07-01

NEW JERSEY RIGHT TO KNOW COMPONENTS

WATER	CAS-No.: 7732-18-5	
TETRASODIUM 3,3'-[(3,3'-DIMETHYL[1,1'-BIPHENYL]-4,4'-DIYL)BIS(AZO)]BIS[5-AMINO-4-HYDROXYNAPHTHALENE-2,7-DISULPHONATE]	CAS-No.: 72-57-1	Revision date 2007-07-01

CALIFORNIA PROP. 65 COMPONENTS

WARNING! THIS PRODUCT CONTAINS A CHEMICAL KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER.

TETRASODIUM 3,3'-[(3,3'-DIMETHYL[1,1'-BIPHENYL]-4,4'-DIYL)BIS(AZO)]BIS[5-AMINO-4-HYDROXYNAPHTHALENE-2,7-DISULPHONATE]	CAS-No.: 72-57-1	Revision date 2007-07-01
---	------------------	--------------------------

SECTION 16: OTHER INFORMATION

DISCLAIMER:

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This material is sold for research purposes only and is not required to appear on the TSCA inventory. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. DeNovix Inc. shall not be held liable for any damage resulting from handling or from contact with the above product.