# Safety Data Sheet



Revision Date: 7/25/2014

SDS # SDS-10151-02 StableDAB Solution B

# 1. PRODUCT AND COMPANY IDENTIFICATION

Product Description: Product Code

StableDAB Solution B 37-00-83

Hazardous Reagent Hazardous Reagent Product code

StableDAB Solution B Catalog No. listed above

Recommended Use Reagent

Contact Manufacturer KPL, Inc. Phone #: 1-301-948-7755

910 Clopper Road
Gaithersburg, Maryland 20878

Fax #: 1-301-948-0169

USA

Web: www.kpl.com
Email: kplmsds@seracare.com

**Emergency Telephone Numbers:** 

AUSTRALIA – POISONS INFORMATION CENTER Telephone: 13 11 26 Hours: 24 hours

CANADIAN TRANSPORT EMERGENCY CENTER
UK – THE NATIONAL FOCUS
USA- NATIONAL RESPONSE CENTER
Telephone: (1 ) 613 996 6666
Telephone: (44) 029 2041 6388
Telephone: (1 ) 800 424 8802
Hours: 24 hours/day, 7 days/week
Telephone: (1 ) 800 424 8802
Hours: 24 hours/day, 7 days/week

CHEMTREC: CHEMTREC Customer Number:- CCN12505\*

For Chemical Emergency Spill, Leak, Fire, Exposure, or Accident

Call CHEMTREC Day or Night

Within USA and Canada: 1-800-424-9300 CCN12505 or

+1 703-527-3887 (collect calls accepted)

## 2. HAZARD IDENTIFICATION

Hazard Type 3,3'-Diaminobenzidine Tetrahydrochloride Hydrate - Suspected Carcinogen

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

**GHS Classification** 3,3'-Diaminobenzidine Tetrahydrochloride Hydrate

CAS-No.: 868272-85-9

Carcinogenicity, Category 2; H351 Acute toxicity, Category 4, oral; H302 Skin irritation, Category 2; H315 Eye irritation, Category 2; H319

Specific Target Organ Toxicity (single exposure), Category 3; H335

**Hazard Statements:** H351: Suspected of causing cancer.

H302: Harmful if swallowed. H315: Causes skin irritation.

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

**Precautionary Statements:** P281: Use personal protective equipment as required.

P261: Avoid breathing dust/fume/gas/mist/vapours/spray.

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing.

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

Symbols and Indications of

Danger:

GHS08 GHS07: Danger





**Principle Route of Exposure** The substance can be absorbed into the body by inhalation, through the skin and by ingestion.

Acute Effects: Eye: May cause redness and blurred vision.

Acute Effects: Skin: Dry skin and Irritation may occur

Acute Effects: Inhalation: Headache and Nausea may occur.

Acute Effects: Ingestion: Nausea, Vomiting and Drowsiness may occur

Chronic Effects: Not Available

Additional Information Not Available

# 3. COMPOSITION/INFORMATION ON INGREDIENTS

 Component
 CHEMICAL
 % Weight
 CAS #:

 StableDAB Solution B
 1,2,6 Trihydroxyhexane
 55.45%
 106-69-4

3,3'-Diaminobenzidine Tetrahydrochloride 1.5% 868272-85-9

Hydrate

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Specific Target Organ Toxicity (single exposure), Category 3; H335

## 4. FIRST AID MEASURES

**General Advice** Wash contaminated clothing before reuse.

**Oral Exposure** Do not induce vomiting. Refer for medical attention.

**Inhalation Exposure** Remove subject to fresh air. Seek medical attention if necessary.

Skin Exposure Remove contaminated clothes. Rinse and then wash skin with water and soap. Seek medical

attention if irritation persists.

Eye Exposure First rinse with plenty of water for several minutes (remove contact lenses if easily possible).

Seek medical attention if irritation persists.

# 5. FIRE FIGHTING MEASURES

Extinguishing media Foam, Alcohol Foam, CO2, Dry Chemical and Water/Fog

**Unusual Fire and Explosive** 

**Hazards** 

May emit toxic fumes under fire conditions.

**Flash Point** Not Available

Autoignition Temperature Not Applicable

Flammability Statement Not Applicable

the chemical

Specific hazards arising from May emit toxic fumes under fire conditions. Wear self-contained breathing apparatus and

protective clothing to prevent contact with skin and eyes.

Protective equipment and precautions for firefighters Wear self-contained breathing apparatus and protective clothing to prevent contact with skin

and eyes.

# 6. ACCIDENTAL RELEASE MEASURES

Avoid contact with skin and clothing. **Personal Precautions** 

**Environmental Precautions** Not Available

**Method of Containment** Collect leaking and spilled liquid in sealable containers as far as possible. Absorb remaining

liquid in sand or inert absorbent and remove to safe place.

Methods of Clean-up Clean-up with copious amounts of water.

Other Information Not Applicable

## 7. HANDLING AND STORAGE

Handling: Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Avoid

> contact with eyes, skin, and clothing. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Keep container tightly closed. Keep away from heat, sparks and flame. Avoid ingestion and inhalation. Do not pressurize, cut, weld, braze, solder, drill, grind, or

expose empty containers to heat, sparks or open flames.

Storage: Store at 4°C. Separated from strong oxidants. Keep away from heat, sparks, and flame. Keep

away from sources of ignition. Keep container closed when not in use.

## 8. EXPOSURE CONTROL

**Respiratory Protection** None required if good ventilation is maintained. Otherwise wear MSHA/NIOSH approved

respirator suitable for vapor or mist concentrations encountered. May be harmful if inhaled in

very large quantities.

**Eye Protection** Safety spectacles.

Protective gloves. Protective clothing. Skin Protection Ingestion

Do not eat, drink, or smoke during work.

#### 9. PHYSICAL AND CHEMICAL PROPERTIES

Light to medium brown solution. Relatively free of particulate matter **Appearance** 

**Physical State** Liquid

Not Applicable Odor **Odor Threshold** Not Applicable Not Available Ha

**Boiling Point** Data for 1,2,6 Trihydroxyhexane:- 178 deg C @ 6.70mm Hg

**Evaporation Rate** Not Available

Data for 1,2,6 Trihydroxyhexane:- 4.63 Vapor Density

Vapor Pressure Data for 1,2,6 Trihydroxyhexane:- 0.1 mm Hg @ 20

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Relative Density Not Availble
Auto-Ignition Temperature Not Available
Water Solubility Dilutable

**Flammability** Data for 1,2,6 Trihydroxyhexane:- Combustible

Flash Point Not Available

Viscosity Data for 1,2,6 Trihydroxyhexane:- cP 20 deg C

Oxidizing Properties Not Available
Explosive Properties Not Available
Additional Parameters Not Available

# 10. STABILITY AND REACTIVITY

Chemical Stability Stable.

Conditions to avoid Not Available

**Incompatibility Materials to** 

Avoid

Other strong oxidizing agents, acid chlorides, acid anhydrides

**Hazardous Decomposition** 

**Products** 

Upon evaporation of water, may emit carbon monoxide, carbon dioxide, SO X

Hazardous Polymerization Will not occur

Possibility of hazardous Not Available

reactions

# 11. TOXICOLOGY MEASURES

# **Acute Toxicity**

The toxicological risks are minor due to the low concentration of hazardous ingredients. The following toxicological information is for the hazardous ingredient in pure form.

LD50 OralNot AvailableLD50 DermalNot AvailableLC50 InhalationNot Available

**Chronic Toxicity** 

Carcinogenicity Data for 100% 3,3'-Diaminobenzidine Tetrahydrochloride Hydrate: May Cause Cancer

IrritationYes. May occurCorrosivityNot AvailableSensitizationNot AvailableNeurological EffectsNot Available

Mutagenic Effects Data for 100% 3,3'-Diaminobenzidine Tetrahydrochloride Hydrate: Suspected of causing

genetic defects.

Reproductive Effects

Not Available

Developmental Effects

Not Available

Target Organ Effects

Not Available

Other adverse effects

Not Available

# 12. ECOLOGICAL MEASURES

Ecotoxicity Not Available

Persistence/Degradability Not Available

**Mobility in Environmental** 

Media

Not Available

Bioaccumulation/ Accumulation Not Available

# 13. DISPOSAL MEASURES

Waste Disposal Method: Observe all Federal, State and Local laws concerning health and pollution. Avoid escape into

water, drainage, sewer, or the ground. If there is no way of recycling it must be disposed of in

compliance with the respective national and local regulations.

Contaminated Packaging: Avoid contact with skin and clothing. Dispose of in compliance with the respective national and

local regulations.

US EPA Waste Number: Not Available

### 14. TRANSPORTATION MEASURES

DOT: Not Available
IATA: Not Available
ADR (road)/ RID (rail): Not Available
IMDG (sea): Not Available
General Transport Regulations Not Available

# 15. REGULATORY MEASURES

This product is a mixture that may contain one or more hazardous chemicals. The hazardous ingredients listed are only those as required by 29 CFR 1910.1200 (OSHA HCS).

## **SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains no chemical or chemicals which are subject to the reporting requirements of the Act and and Title 40n of the Code of Federal Regulations, Part 372.

#### Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (See 40 CFR 61)

Not Listed

# **State Regulations**

# **California Proposition 65:**

This product contains the following Proposition 65 chemicals: None of the chemicals in this product are listed.

#### State Right to Know Act

Chemical Name	1,2,6 Trihydroxyhexane	3,3'-Diaminobenzidine
		Tatualisada a bilantida

Tetrahydrochloride

Hydrate

MassachusettsNot ListedNot ListedNew JerseyNot ListedNot ListedPennsylvaniaNot ListedNot ListedNew YorkNot ListedNot ListedRhode IslandNot ListedNot Listed

## **International Inventories**

Chemical Name 1,2,6 Trihydroxyhexane 3,3'-Diaminobenzidine

Tetrahydrochloride

Hydrate

TSCA Listed Listed

DSL Listed Listed

**NDSL** Not Listed Not Listed **EINECS** Listed Listed **CHINA** Listed Listed **KECL** Listed Not Listed JAPAN: Listed Listed Listed **AICS** Listed

The product does not contain a hazardous ingredient in an amount that requires identification and labeling according to EC directives.

Annex I Index# Annex ID: Not Available

3,3'-Diaminobenzidine tetrahydrochloride Hydrate 3,3',4,4'-Tetraaminobiphenyl tetrahydrochloride

DAB

CAS-No.: 868272-85-9 EC-No.: 231-018-9

SUBSTANCE GROUP CODE

133210 Chlorides

144930 Salts of aromatic amines

144201 Amino compounds, aromatic (amino group on the ring)

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contact lenses, if present and easy to do. Continue rinsing.

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Symbols and Indications

of Danger

GHS08 GHS07: Danger

**Specific Concentration** 

Limits

Not Applicable

**Export and Import** This substance is not listed in the Annex I of Regulation (EC) No 649/2012.

European Priority List This substance is not listed in a priority list (as foreseen under Council Regulation (EEC) No

793/93 on the evaluation and control of the risks of existing substances.)

### 16. OTHER INFORMATION

The above information is believed to be correct, but does not purport to be all inclusive and shall be used only as a guide. KPL shall not be held liable for any damage resulting from handling or from contact with the above product. Users should make their own investigations to determine the suitability of the information for their particular purposes. This material is sold for research purposes and is intended as laboratory reagents only. It is not intended for food, drug, household, agricultural or cosmetic use. Its use must be supervised by a technically qualified individual experienced in handling potentially hazardous chemicals.