1 Identification

- **Product identifier**
  - **Trade name:** Alkaline Trypan Blue
  - **Relevant identified uses of the substance or mixture and uses advised against**
    No further relevant information available.
  - **Product description** Fungal Stain

- **Details of the supplier of the safety data sheet**
  - **Manufacturer/Supplier:** Dermatologic Lab & Supply, Inc.
    608 13th Ave.
    Council Bluffs, IA USA 51501-6401
    Voice: (800) 831-6273 or (712) 323-3269
    Fax: (800) 320-9612 or (712) 323-1156
    www.delasco.com
  - **Emergency telephone number:** Chemtrec 800-424-9300

2 Hazard(s) identification

- **Classification of the substance or mixture**
  - GHS08 Health hazard
    - Carc. 2 H351 Suspected of causing cancer.
  - GHS05 Corrosion
    - Skin Corr. 1B H314 Causes severe skin burns and eye damage.
    - Eye Dam. 1 H318 Causes serious eye damage.

- **Label elements**
  - **GHS label elements**
    The product is classified and labeled according to the Globally Harmonized System (GHS).
  - **Hazard pictograms**
    - GHS05
    - GHS08

- **Signal word** Danger

- **Hazard-determining components of labeling:**
  - Potassium Hydroxide

- **Hazard statements**
  - Causes severe skin burns and eye damage.
  - Suspected of causing cancer.

- **Precautionary statements**
  - Do not breathe dusts or mists.
  - Wear eye protection / face protection.
  - Wash thoroughly after handling.
  - Obtain special instructions before use.
  - Do not handle until all safety precautions have been read and understood.

(Contd. on page 2)
**Trade name:** Alkaline Trypan Blue

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center/doctor. Specific treatment (see supplementary first aid instructions on this Safety Data Sheet). IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Wash contaminated clothing before reuse. IF swallowed: Rinse mouth. Do NOT induce vomiting. Store locked up. Dispose of contents/container in accordance with local/regional/national/international regulations.

- **Classification system:** NFPA/HMIS Definitions: 0-Least, 1-Slight, 2-Moderate, 3-High, 4-Extreme
- **NFPA ratings (scale 0 - 4)**
  - Health = 2
  - Fire = 0
  - Reactivity = 0
- **HMIS-ratings (scale 0 - 4)**
  - HEALTH: Health = 2
  - FIRE: Fire = 0
  - REACTIVITY: Reactivity = 0
- **Hazard(s) not otherwise classified (HNOC):** None known

### 3 Composition/information on ingredients

- **Description:** Mixture of substances listed below with nonhazardous additions.
- **Dangerous Components:**
  - CAS: 1310-58-3
  - RTECS: TT 2102000
  - Potassium Hydroxide
    - Skin Corr. 1A, H314; Acute Tox. 4, H302
    - ≤ 2.5%
  - CAS: 72-57-1 tetrasodium 3,3’-[3,3’-dimethyl[1,1’-biphenyl]-4,4’-diyl]bis(azo)]bis[5-amino-4-hydroxynaphthalene-2,7-disulphonate]
    - Carc. 2, H351; STOT SE 3, H335
    - ≤ 2.5%

### 4 First-aid measures

- **Description of first aid measures**
  - **General information:** Immediately remove any clothing soiled by the product.
  - **After inhalation:**
    - Supply fresh air. If required, provide artificial respiration. Consult doctor if symptoms persist.
    - In case of unconsciousness, place patient securely on side position for transportation.
  - **After skin contact:**
    - Immediately wash with water and soap and rinse thoroughly.
    - If skin irritation occurs, consult a doctor.
  - **After eye contact:**
    - Hold eyelids apart and flush eyes with plenty of water for at least 15 minutes. Get medical attention.
  - **After swallowing:**
    - Do not induce vomiting without medical advice.
    - Drink copious amounts of water and provide fresh air. Immediately call a doctor.
  - **Information for doctor:**
  - **Most important symptoms and effects, both acute and delayed:** No further relevant information available.

(Contd. on page 3)
5 Fire-fighting measures

· Extinguishing media
· Suitable extinguishing agents: CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
· Special hazards arising from the substance or mixture No further relevant information available.
· Advice for firefighters Use water spray to cool unopened containers.
· Protective equipment: As in any fire, wear self-contained breathing apparatus pressure-demand (NIOSH approved or equivalent), and full protective gear to prevent contact with skin and eyes.

6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures
  Ensure adequate ventilation
  Avoid contact with skin, eyes and clothing.
  Keep people at a distance and stay upwind.
  Keep away from ignition sources
  Do not inhale gases / fumes /aerosols
  Wear protective equipment. Keep unprotected persons away.
· Environmental precautions:
  Dilute with plenty of water.
  Do not allow to enter sewers/surface or ground water.
· Methods and material for containment and cleaning up:
  Absorb with liquid-binding material (i.e. sand, diatomite, acid binders, universal binders, sawdust).
  Use neutralizing agent.
  Dispose contaminated material as waste according to section 13.
  Ensure adequate ventilation.
  Dispose of the collected material according to regulations.
· Reference to other sections
  See Section 7 for information on safe handling.
  See Section 8 for information on personal protection equipment.
  See Section 13 for disposal information.

7 Handling and storage

· Handling:
· Precautions for safe handling
  Keep away from heat and direct sunlight.
  Avoid contact with skin, eyes and clothing
  Ensure good ventilation/exhaustion at the workplace.
  Prevent formation of aerosols.
· Information about protection against explosions and fires: No special measures required.
· Conditions for safe storage, including any incompatibilities
  Store away from strong acids, strong oxidizing agents, strong reducing agents, reactive meals (Zinc & Aluminum) and their alloys (Brass, etc.), Tin/Tin Oxides, Lead, Phosphorous and Nitro compounds.
· Storage:
· Requirements to be met by storerooms and receptacles: No special requirements.
· Information about storage in one common storage facility: Not required.
· Further information about storage conditions: Keep receptacle tightly sealed.
Trade name: Alkaline Trypan Blue

- **Specific end use(s)** No further relevant information available.

### 8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see section 7.

- **Control parameters**
  All ventilation should be designed in accordance with OSHA standard (29 CFR 1910.94). Use mechanical (general) ventilation for storage areas. Use appropriate ventilation as required to keep Exposure Limits in Air below TLV & PEL limits.

- **Components with occupational exposure limits:**

<table>
<thead>
<tr>
<th>Component</th>
<th>REL Ceiling limit value</th>
<th>TLV Ceiling limit value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1310-58-3 Potassium Hydroxide</td>
<td>2 mg/m³</td>
<td>2 mg/m³</td>
</tr>
</tbody>
</table>

- **Additional information:** The lists that were valid during the creation of this SDS were used as basis.

- **Exposure controls**

- **Personal protective equipment:**

- **General protective and hygienic measures:**
  The usual precautionary measures for handling chemicals should be followed.
  Keep away from foodstuffs, beverages and feed.
  Immediately remove all soiled and contaminated clothing and wash before reuse.
  Wash hands before breaks and at the end of work.
  Avoid contact with the eyes.
  Avoid contact with the eyes and skin.

- **Breathing equipment:**
  In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure, use respiratory protective device that is independent of circulating air.

- **Protection of hands:**

  ![Protective gloves]

  The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
  Select glove material based on penetration times, rates of diffusion and degradation.

- **Material of gloves**
  The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material cannot be calculated in advance and has therefore to be checked prior to the application.

- **Penetration time of glove material**
  The exact break-through time has to be determined and observed by the manufacturer of the protective gloves.

- **Eye protection:**

  ![Tightly sealed goggles]

(Contd. on page 5)
Trade name: Alkaline Trypan Blue

- Body protection:
  
  Protective work clothing

### 9 Physical and chemical properties

- **Information on basic physical and chemical properties**
  
  **General Information**
  
  **Appearance:**
  
  - Form: Liquid
  - Color: Blue
  
  **Odor:** Slightly pungent
  
  **Odor threshold:** Not determined.
  
  **pH-value:** >13.0

- **Change in condition**
  
  **Melting point/Melting range:** --
  
  **Boiling point/Boiling range:** 100 °C (212 °F)

- **Flash point:** Not applicable.

- **Flammability (solid, gaseous):** Not applicable.

- **Ignition temperature:**
  
  **Decomposition temperature:** Not determined.

- **Auto igniting:** Product is not self-igniting.

- **Danger of explosion:** Product does not present an explosion hazard.

- **Explosion limits:**
  
  - Lower: 0.0 Vol %
  - Upper: 0.0 Vol %

- **Vapor pressure @ 20 °C (68 °F):** 23 hPa (17 mm Hg)

- **Density:**
  
  - Relative density: Not determined.
  - Vapor density: Not determined.
  - Evaporation rate: Not determined.

- **Solubility in / Miscibility with**
  
  **Water:** Fully miscible.

- **Partition coefficient (n-octanol/water):** Not determined.

- **Viscosity:**
  
  - Dynamic: Not determined.
  - Kinematic: Not determined.

- **Solvent content:**
  
  - Organic solvents: 0.0 %
  - Water: 96.9 %
  
  **Solids content:** 3.1 %

(Contd. on page 6)
Safety Data Sheet (SDS)
OSHA HazCom Standard 29 CFR 1910.1200(g) and GHS Rev 03.

Issue date 06/11/2015 Reviewed on 06/11/2015

Trade name: Alkaline Trypan Blue

10 Stability and reactivity

- **Reactivity**: No further relevant information available.
- **Chemical stability**: Stable under normal conditions.
- **Thermal decomposition / conditions to be avoided**: No decomposition if used according to specifications.
- ** Possibility of hazardous reactions**: No dangerous reactions known.
- **Conditions to avoid**: No further relevant information available.
- **Incompatible materials**: Strong acids, strong oxidizing agents, strong reducing agents, reactive meals (Zinc & Aluminum) and their alloys (Brass, etc.), Tin/Tin Oxides, Lead, Phosphorous and Nitro compounds.
- **Hazardous decomposition products**: Carbon Oxides, Nitrogen Oxides (NOx), Sulfur Oxides, Potassium Oxides and Sodium Oxides.

11 Toxicological information

- **Information on toxicological effects**
  - **Acute toxicity**:
    - **LD/LC50 values that are relevant for classification**:
      - **1310-58-3 Potassium Hydroxide**
        - Oral LD50 273 mg/kg (rat)
        - Inhalative LC50/96 hours 80 mg/l (daphnia)
  - **Primary irritant effect**:
    - **on the skin**: Strong caustic effect on skin and mucous membranes.
    - **on the eye**: Strong irritant with the danger of severe eye injury.
      - Corrosive effect.
  - **Additional toxicological information**:
    - The product shows the following dangers according to internally approved calculation methods for preparations:
      - Corrosive
      - Irritant
    - Swallowing will lead to a corrosive effect on mouth and throat and to the danger of perforation of esophagus and stomach.

- **Carcinogenic categories**
  - **IARC (International Agency for Research on Cancer)**
    - Group 1 - Carcinogenic to humans
    - Group 2A - Probably carcinogenic to humans
    - Group 2B - Possibly carcinogenic to humans
    - Group 3 - Not classifiable as to its carcinogenicity to humans
    - Group 4 - Probably not carcinogenic to humans
  - **72-57-1 tetrasodium 3,3’-[(3,3’-dimethyl[1,1’-biphenyl]-4,4’-diyl)bis(azo)]bis[5-amino-4- hydroxynaphthalene-2,7-disulphonate]**
  - **2B**

- **NTP (National Toxicology Program)**
  - None of the ingredients are listed.

- **OSHA-Ca (Occupational Safety & Health Administration)**
  - None of the ingredients are listed.

(Contd. on page 7)
12 Ecological information

- **Toxicity** The hazards for the aquatic environment are unknown.
- **Aquatic toxicity**: No further relevant information available.
- **Persistence and degradability**: No further relevant information available.
- **Behavior in environmental systems**:
  - **Bioaccumulative potential**: No further relevant information available.
  - **Mobility in soil**: No further relevant information available.
- **Additional ecological information**:
  - **General notes**: Must not reach bodies of water or drainage ditch undiluted or unneutralized.
- **Results of PBT and vPvB assessment**
  - **PBT**: Not applicable.
  - **vPvB**: Not applicable.
- **Other adverse effects**: No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**
  - **Recommendation**: Observe all federal, state and local environmental regulations when disposing of this material.
  - Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings**:
  - **Recommendation**: Disposal must be made according to official regulations.
  - **Recommended cleansing agent**: Water, if necessary with cleansing agents.

14 Transport information

- **UN-Number**
  - UN3266
- **DOT, ADR, IMDG, IATA**
  - **DOT**: Corrosive liquid, basic, inorganic, n.o.s. (Potassium hydroxide)
  - **ADR**: UN3266 Corrosive liquid, basic, inorganic, n.o.s. mixture
  - **IMDG, IATA**: CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. mixture
- **Transport hazard class(es)**
  - **DOT**
    - **Class**: 8 Corrosive substances
    - **Label**: 8
  - **ADR**
    - **Class**: 8 (C5) Corrosive substances

(Contd. on page 8)
Trade name: Alkaline Trypan Blue

- **Label**: 8
- **IMDG, IATA**

- **Class**: 8 Corrosive substances
- **Label**: 8
- **Packing group**
- **DOT, ADR, IMDG, IATA**: II
- **Environmental hazards**: Not applicable.
- **Special precautions for user**
  - Warning: Corrosive substances
- **Danger code (Kemler)**: 80
- **EMS Number**: F-A,S-B
- **Segregation groups**
  - Alkalis
- **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**: Not applicable.

**Transport/Additional information**:

- **DOT**
  - **Quantity limitations**
    - On passenger aircraft/rail: 1 L
    - On cargo aircraft only: 30 L

- **ADR**
  - **Excepted quantities (EQ)**
    - Code: E2
    - Maximum net quantity per inner packaging: 30 ml
    - Maximum net quantity per outer packaging: 500 ml

- **IMDG**
  - **Limited quantities (LQ)**: 1L
  - **Excepted quantities (EQ)**
    - Code: E2
    - Maximum net quantity per inner packaging: 30 ml
    - Maximum net quantity per outer packaging: 500 ml

- **UN "Model Regulation"**: UN3266, Corrosive liquid, basic, inorganic, n.o.s. mixture, 8, II

**15 Regulatory information**

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
  - **Sara**
  - **Section 355 (extremely hazardous substances)**: None of the ingredients are listed.
  - **Section 313 (Specific toxic chemical listings)**: 72-57-1 tetrasodium 3,3'-(3,3'-dimethyl[1,1'-biphenyl]-4,4'-diyl)bis(azo)]bis[5-amino-4-hydroxynaphthalene-2,7-disulphonate] (Contd. on page 9)
Trade name: Alkaline Trypan Blue

- **Chemicals known to cause reproductive toxicity for females:**
  None of the ingredients are listed.

- **Chemicals known to cause reproductive toxicity for males:**
  None of the ingredients are listed.

- **Chemicals known to cause developmental toxicity:**
  None of the ingredients are listed.

- **Carcinogenic categories**
  - **EPA (Environmental Protection Agency)**
    None of the ingredients are listed.
  - **TLV (Threshold Limit Value established by ACGIH)**
    None of the ingredients are listed.
  - **NIOSH-Ca (National Institute for Occupational Safety and Health)**
    None of the ingredients are listed.

- **GHS label elements**
  The product is classified and labeled according to the Globally Harmonized System (GHS).

- **Hazard pictograms**
  GHS05  GHS08

- **Signal word** Danger

- **Hazard-determining components of labeling:**
  Potassium Hydroxide

- **Hazard statements**
  Causes severe skin burns and eye damage.
  Suspected of causing cancer.

- **Precautionary statements**
  Do not breathe dusts or mists.
  Wear eye protection / face protection.
  Wash thoroughly after handling.
  Obtain special instructions before use.
  Do not handle until all safety precautions have been read and understood.
  IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
  If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
  Immediately call a poison center/doctor.
  Specific treatment (see supplementary first aid instructions on this Safety Data Sheet).
  IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
  Wash contaminated clothing before reuse.
  IF exposed or concerned: Get medical advice/attention.
  If swallowed: Rinse mouth. Do NOT induce vomiting.
  Store locked up.
  Dispose of contents/container in accordance with local/regional/national/international regulations.

(Contd. on page 10)
Trade name: Alkaline Trypan Blue

- **National regulations:**
  
  The product is subject to be classified according to the latest version of the regulations on hazardous substances.

- **State Right to Know**

<table>
<thead>
<tr>
<th>CAS: 7732-18-5</th>
<th>Water, distilled water, deionized water</th>
<th>90-99%</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS: 1310-58-3</td>
<td>Potassium Hydroxide</td>
<td>≤ 2.5%</td>
</tr>
<tr>
<td>RTECS: TT 2102000</td>
<td>Skin Corr. 1A, H314; Acute Tox. 4, H302</td>
<td></td>
</tr>
<tr>
<td>CAS: 72-57-1</td>
<td>tetrasodium 3,3’-[(3,3’-dimethyl[1,1’-biphenyl]-4,4’-diyl)bis(azo)]bis[5-amino-4-hydroxynaphthalene-2,7-disulphonate]</td>
<td>≤ 2.5%</td>
</tr>
<tr>
<td>RTECS: TT 2102000</td>
<td>Carc. 2, H351; STOT SE 3, H335</td>
<td></td>
</tr>
<tr>
<td>CAS: 577-11-7</td>
<td>Docusate Sodium</td>
<td>≤ 2.5%</td>
</tr>
<tr>
<td>RTECS: WN 0525000</td>
<td>Eye Dam. 1, H318; Skin Irrit. 2, H315; Aquatic Acute 3, H402</td>
<td></td>
</tr>
<tr>
<td>CAS: 532-32-1</td>
<td>Sodium Benzoate</td>
<td>≤ 2.5%</td>
</tr>
<tr>
<td></td>
<td>Acute Tox. 4, H302; STOT SE 3, H335; Eye Irrit. 2B, H320</td>
<td></td>
</tr>
</tbody>
</table>

  All ingredients are listed.

- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

**16 Other information**

The information and recommendations in this safety data sheet are, to the best of our knowledge, accurate as of the date of issue. Nothing herein shall be deemed to create warranty, expressed or implied, and shall not establish a legally valid contractual relationship. It is the responsibility of the user to determine applicability of this information and the suitability of the material or product for any particular purpose.

- **Date of preparation / last revision** 06/11/2015 / -

- **Abbreviations and acronyms:**
  
  ADR: The European Agreement concerning the International Carriage of Dangerous Goods by Road
  ADN: The European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
  IMDG: International Maritime Code for Dangerous Goods
  DOT: US Department of Transportation
  IATA: International Air Transport Association
  ACGIH: American Conference of Governmental Industrial Hygienists
  EINECS: European Inventory of Existing Commercial Chemical Substances
  ELINCS: European List of Notified Chemical Substances
  CAS: Chemical Abstracts Service (division of the American Chemical Society)
  NFPA: National Fire Protection Association (USA)
  HMIS: Hazardous Materials Identification System (USA)
  LC50: Lethal concentration, 50 percent
  LD50: Lethal dose, 50 percent
  Acute Tox. 4: Acute toxicity, Hazard Category 4
  Skin Corr. 1A: Skin corrosion/irritation, Hazard Category 1A
  Skin Corr. 1B: Skin corrosion/irritation, Hazard Category 1B
  Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1
  Carc. 2: Carcinogenicity, Hazard Category 2
  STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3

- **Data compared to the previous version altered.**

  SDS created by MSDS Authoring Services www.msdsauthoring.com +1-877-204-9106