

Date Prepared: 03/03/2011

Reviewed On: 02/11/2011

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

- **Product Identifier**
- **Product Name:** TB Auramine-Rhodamine T
- **Catalog Number:** 212515
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
 BD Diagnostic Systems  
 7 Loveton Circle  
 Sparks, MD 21152  
 Telephone.: (410) 771 - 0100 or (800) 638 – 8663
- **Information Department:** Technical Service
- **Emergency telephone number:**  
 In case of a chemical emergency, spill, fire, exposure, or accident contact BD Diagnostic Systems (410) 771-0100 or (800)-638-8663, or ChemTrec at (800) 424-9300.

## 2 Composition/information on ingredients

- **Chemical characterization:** Mixture
- **Description:** Mixture consisting of the following components.

### • **Dangerous Components:**

|           |             |       |
|-----------|-------------|-------|
| 67-63-0   | isopropanol | 14.0% |
| 108-95-2  | phenol      | 8.8%  |
| 2465-27-2 | auramine O  | 1.2%  |

## 3 Hazards identification

- **Classification of the substance or mixture**
- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**



T; Toxic

R24/25: Toxic in contact with skin and if swallowed.



C; Corrosive

R34: Causes burns.



Xn; Harmful

R40: Limited evidence of a carcinogenic effect.

R10: Flammable.

- **Classification system:**

The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.

- **Label elements**

- **Labelling according to EU guidelines:**

This product has been classified according to the hazard criteria of the Controlled Products Regulations (CPR), and the MSDS contains all of the information required by the CPR.

- **Code letter and hazard designation of product:**

T Toxic

- **Hazard-determining components of labelling:**

auramine O

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 phenol  
 isopropanol  
 rhodamine B

**· Risk phrases:**

- 10 Flammable.
- 24/25 Toxic in contact with skin and if swallowed.
- 34 Causes burns.
- 40 Limited evidence of a carcinogenic effect.

**· Safety phrases:**

- 7 Keep container tightly closed.
- 16 Keep away from sources of ignition - No smoking.
- 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- 36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
- 45 In case of accident or if you feel unwell, seek medical advice immediately.
- 60 This material and its container must be disposed of as hazardous waste.

**· Classification system**
**· NFPA ratings (scale 0-4)**

 Health = 3  
 Fire = 3  
 Reactivity = 0

**· HMIS ratings (scale 0-4)**

 Health = 3  
 Fire = 3  
 Reactivity = 0

**4 First aid measures**
**· General information**

Symptoms of poisoning may even occur after several hours; therefore provide medical observation for at least 48 hours after the accident.

- **After inhalation** Supply fresh air; consult doctor in case of complaints.
- **After skin contact** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact** Rinse opened eye for 15 minutes under running water. Then consult a doctor.
- **After swallowing** Call a doctor immediately.
- **Information for doctor** Show this product label or this MSDS.

**5 Firefighting measures**
**· Suitable extinguishing agents**

 CO<sub>2</sub>, ABC multipurpose dry chemical or water spray. Fight larger fires with water spray or alcohol resistant foam.

- **Protective equipment:** No special measures required.

**6 Accidental release measures**

- **Personal precautions, protective equipment and emergency procedures** Not required.

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# Material Safety Data Sheet acc. to ISO/DIS 11014

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**Product Name: TB Auramine-Rhodamine T**

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- **Environmental precautions:** Wipe up with damp sponge or mop.
- **Methods and material for containment and cleaning up:**  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders).
- **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** Ensure good ventilation/exhaustion at the workplace.
- **Information about protection against explosions and fires:**  
Keep ignition sources away - Do not smoke.  
Protect against electrostatic charges.
- **Storage**
- **Requirements to be met by storerooms and receptacles:** 15 - 30 °C
- **Information about storage in one common storage facility:**  
Do not store together with oxidizing and acidic materials.  
Do not store together with alkaline material.  
Do not store with halogens.
- **Further information about storage conditions:** Store in cool, dry conditions in well sealed containers.

## 8 Exposure controls/personal protection

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

- **Components with limit values that require monitoring at the workplace:**

### 67-63-0 isopropanol

|                       |                                                                                                                                               |
|-----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| EL (Canada (English)) | Short-term value: 500 ppm<br>Long-term value: 400 ppm<br>Skin                                                                                 |
| PEL (USA)             | 980 mg/m <sup>3</sup> , 400 ppm                                                                                                               |
| REL (USA)             | Short-term value: 1225 mg/m <sup>3</sup> , 500 ppm<br>Long-term value: 980 mg/m <sup>3</sup> , 400 ppm                                        |
| TLV (USA)             | Short-term value: (1230) mg/m <sup>3</sup> , (500) ppm<br>Long-term value: (983) mg/m <sup>3</sup> , (400) ppm<br>NIC-200; 491; 400; 984; A 4 |

### 108-95-2 phenol

|                       |                                                                                                                     |
|-----------------------|---------------------------------------------------------------------------------------------------------------------|
| EL (Canada (English)) | Short-term value: 10 ppm<br>Long-term value: 5 ppm<br>Skin                                                          |
| PEL (USA)             | 19 mg/m <sup>3</sup> , 5 ppm<br>Skin                                                                                |
| REL (USA)             | Short-term value: C 60* mg/m <sup>3</sup> , C 15.6* ppm<br>Long-term value: 19 mg/m <sup>3</sup> , 5 ppm<br>*15-min |
| TLV (USA)             | 19 mg/m <sup>3</sup> , 5 ppm<br>Skin; BEI                                                                           |

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

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- **Personal Protective Equipment**
- **General protective and hygienic measures**  
 Keep away from foodstuffs, beverages and feed.  
 Immediately remove all soiled and contaminated clothing.  
 Wash hands before breaks and at the end of work.  
 Store protective clothing separately.  
 Avoid contact with the eyes and skin.
- **Breathing equipment:**  
 In case of brief exposure, use a chemical fume hood or a NIOSH/MSHA-approved respirator.
- **Protection of hands:**



Chemical resistant gloves (i.e. nitrile, or equivalent).

- **Eye protection:** Safety glasses
- **Body protection:** Protective work clothing (lab coat).

## 9 Physical and chemical properties

- |                                             |                                                          |
|---------------------------------------------|----------------------------------------------------------|
| · <b>General Information</b>                |                                                          |
| · <b>Appearance:</b>                        |                                                          |
| Form:                                       | Liquid                                                   |
| Color:                                      | Red                                                      |
| Odor:                                       | Characteristic                                           |
| · <b>pH-value:</b>                          | Alkaline                                                 |
| · <b>Change in condition</b>                |                                                          |
| Melting point/Melting range: Not determined |                                                          |
| Boiling point/Boiling range: 82°C           |                                                          |
| · <b>Flash point:</b>                       | 30°C                                                     |
| · <b>Auto igniting:</b>                     | Product is not self igniting.                            |
| · <b>Danger of explosion:</b>               | In use, may form flammable/explosive vapour-air mixture. |
| · <b>Explosion limits:</b>                  |                                                          |
| Lower:                                      | 4.0 Vol %                                                |
| Upper:                                      | 9.5 Vol %                                                |
| · <b>Vapor pressure at 25°C:</b>            | 43.0 hPa                                                 |
| · <b>Density:</b>                           | Not determined                                           |
| · <b>Solubility in / Miscibility with</b>   |                                                          |
| Water:                                      | Soluble                                                  |
| · <b>Solvent content:</b>                   |                                                          |
| Organic solvents:                           | 14.0 %                                                   |

## 10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.

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**· Hazardous decomposition products:**

 Nitrogen oxides (NO<sub>x</sub>)  
 Hydrogen chloride (HCl)  
 Carbon dioxide (CO<sub>2</sub>)

**11 Toxicological information**
**· Acute toxicity:**
**· LD/LC50 values that are relevant for classification:**
**108-95-2 phenol**

|        |      |                 |
|--------|------|-----------------|
| Oral   | LD50 | 300 mg/kg (mus) |
|        |      | 317 mg/kg (rat) |
| Dermal | LD50 | 670 mg/kg (rat) |

**2465-27-2 auramine O**

|      |      |                 |
|------|------|-----------------|
| Oral | LD50 | 480 mg/kg (rat) |
|------|------|-----------------|

**· Primary irritant effect:**
**· on the skin:** Caustic effect on skin and mucous membranes.

**· on the eye:** Strong caustic effect.

**· Sensitization:** No sensitizing effects known.

**· Additional toxicological information:**

The product shows the following dangers according to internally approved calculation methods for preparations:

Toxic

Corrosive (causes skin burns)

Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

**12 Ecological information**
**· Aquatic toxicity:** No further relevant information available.

**· Additional ecological information:**
**· General notes:** Water hazard class 2 (Self-assessment): hazardous for water.

**13 Disposal considerations**
**· Waste treatment methods**
**· Recommendation**

Must not be disposed of with solid waste.

Must adhere to official regulations.

**· Uncleaned packagings:**
**· Recommended cleansing agent:** Water, if necessary with cleansing agents.

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## 14 Transport information

### · DOT regulations:



- **Hazard class:** 9
- **Identification number:** UN3316
- **Packing group:** III
- **Proper shipping name:** CHEMICAL KITS
- **Label** 9

### · TDG (Transport dangerous goods):



- **TDG class:** 9 (M11) Miscellaneous dangerous substances and articles
- **UN-Number:** 3316
- **Packaging group:** III
- **UN proper shipping name:** 3316 CHEMICAL KITS

### · Maritime transport IMDG:



- **IMDG Class:** 9
- **UN Number:** 3316
- **Label** 9
- **Packaging group:** III
- **EMS Number:** F-A,S-P
- **Marine pollutant:** No
- **Proper shipping name:** CHEMICAL KITS

### · Air transport ICAO-TI and IATA-DGR:



- **ICAO/IATA Class:** 9
- **UN/ID Number:** 3316
- **Label** 9
- **Packaging group:** III
- **Proper shipping name:** CHEMICAL KITS

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**15 Regulatory information**• **SARA Section 355 (extremely hazardous substances)**

108-95-2 phenol

• **SARA Section 313 (specific toxic chemical listings)**

67-63-0 isopropanol

108-95-2 phenol

81-88-9 rhodamine B

• **TSCA (Toxic Substances Control Act)**

All ingredients are listed.

• **Carcinogenic categories**• **NTP (National Toxicology Program)**

None of the ingredients is listed.

• **TLV (Threshold Limit Value established by ACGIH)**

67-63-0 isopropanol

A4

108-95-2 phenol

A4

• **Canadian Substance Listing**• **Canadian Domestic Substance List (DSL)**

7732-18-5 water

108-95-2 phenol

2465-27-2 auramine O

81-88-9 rhodamine B

• **Canadian Ingredient Disclosure List (limit 0.1%)**

None of the ingredients is listed.

• **Canadian Ingredient Disclosure List (limit 1%)**

67-63-0 isopropanol

108-95-2 phenol

• **National regulations**• **Water hazard class:** Water hazard class 2 (Self-assessment): hazardous for water.**16 Other information**

To the best of our knowledge, the information contained herein is accurate. However, neither Becton, Dickinson and Company or any of its subsidiaries assumes any liabilities whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we can not guarantee that these are the only hazards that exist.

• **Department issuing MSDS:**

Environmental, Health &amp; Safety

Created by Michael J. Spinazzola

• **Contact:** Technical Service Representative