

1 Identification of substance:

- **Product name:** TB Auramine-Rhodamine T
- **Catalog number:** 212515
- **Manufacturer/Supplier:**
BD Diagnostic Systems
7 Loveton Circle
Sparks, MD 21152
Tel: (410) 771-0100 or (800) 638-8663
- **Information department:** Technical Services
- **Emergency information:**
In case of a chemical emergency, spill, fire, exposure, or accident contact BD Diagnostic Systems at (410)771-0100 or (800)638-8663, or ChemTrec at (800)424-9300.

2 Composition/Data on components:

- **Chemical characterization**
- **Description:** Mixture of the substances listed below with nonhazardous additions.

· **Dangerous components:**

67-63-0	isopropanol	14.0%
108-95-2	phenol	8.8%
2465-27-2	auramine O	1.2%
81-88-9	rhodamine B	0.6%

3 Hazards identification

· **Hazard description:**



T Toxic

· **Information pertaining to particular dangers for man and environment**

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

· **Classification system**

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

· **NFPA ratings (scale 0-4)**



Health = 3
Fire = 3
Reactivity = 0

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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 Fire fighting measures**· Suitable extinguishing agents**

CO₂, 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**· Person-related safety precautions:** Not required.

- **Measures for environmental protection:** Wipe up with damp sponge or mop.

· Measures for cleaning/collecting:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders).

· Additional information:

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**

- **Information 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.

· Storage class C**8 Exposure controls and personal protection**

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

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· Components with limit values that require monitoring at the workplace:

67-63-0 isopropanol

PEL	980 mg/m ³ , 400 ppm
REL	Short-term value: 1225 mg/m ³ , 500 ppm Long-term value: 980 mg/m ³ , 400 ppm
TLV	Short-term value: 984 mg/m ³ , 400 ppm Long-term value: 492 mg/m ³ , 200 ppm

108-95-2 phenol

PEL	19 mg/m ³ , 5 ppm Skin
REL	Short-term value: C 60* mg/m ³ , C 15.6* ppm Long-term value: 19 mg/m ³ , 5 ppm *15-min
TLV	19 mg/m ³ , 5 ppm Skin; BEI

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

· 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:

· General Information

Form:	Liquid
Color:	Red
Odor:	Characteristic

· Change in condition

Melting point/Melting range:	Not determined
Boiling point/Boiling range:	82°C (180°F)

· Flash point: 30°C (86°F)

· Auto igniting: Product is not self igniting.

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· **Danger of explosion:** *In use, may form flammable/explosive vapour-air mixture.*

· **Explosion limits:**

Lower: 4.0 Vol %

Upper: 9.5 Vol %

· **Vapor pressure at 25°C (77°F):** 43.0 hPa (32 mm Hg)

· **Density:** *Not determined*

· **Solubility in / Miscibility with**

Water: *Soluble*

· **pH-value:** *Alkaline*

· **Solvent content:**

Organic solvents: 14.0 %

10 Stability and reactivity

· **Thermal decomposition / conditions to be avoided:**

No decomposition if used according to specifications.

· **Materials to be avoided:** *Incompatible materials: acids, bases, and oxidizers.*

· **Dangerous reactions** *No dangerous reactions known*

· **Dangerous products of decomposition:**

Nitrogen oxides (NO_x)

Hydrogen chloride (HCl)

Carbon dioxide (CO₂)

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)
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2465-27-2 auramine O

Oral	LD50	480 mg/kg (rat)
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· **Primary irritant effect:**

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

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

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

· **Subacute to chronic toxicity:** *Target organs: thyroid, kidney, ureter or bladder tumors.*

· **Additional toxicological information:**

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

Harmful

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Carcinogenic

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

12 Ecological information:

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

13 Disposal considerations

· **Product:**

· **Recommendation**

Must not be disposed of with solid waste.

Dispose of material in accordance with federal (40 CFR 261.3), state and local requirements.

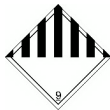
RCRA hazardous waste - RCRA # D001 (ignitable).

· **Uncleaned packagings:**

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

14 Transport information

· **DOT regulations:**



· **Hazard class:** 9

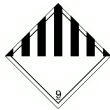
· **Identification number:** UN3316

· **Packing group:** III

· **Proper shipping name:** CHEMICAL KITS

· **Label:** 9

· **Land transport ADR/RID (cross-border)**



· **ADR/RID class:** 9 (M11) Miscellaneous dangerous substances and articles

· **UN-Number:** 3316

· **Packaging group:** III

· **Description of goods:** 3316 CHEMICAL KITS

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USA

Product name: TB Auramine-Rhodamine T

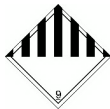
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· Maritime transport IMDG:



- **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

15 Regulations

· SARA Section 355 (extremely hazardous substances)

108-95-2	phenol
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· 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)

67-63-0	isopropanol
108-95-2	phenol
2465-27-2	auramine O
81-88-9	rhodamine B

· California Proposition 65 - Chemicals known to cause cancer

81-88-9	rhodamine B
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· California Proposition 65 - Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

· California Proposition 65 - Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

· California Proposition 65 - Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

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· **Carcinogenicity categories**

· **IARC (International Agency for Research on Cancer)**

67-63-0	isopropanol	3
108-95-2	phenol	3
81-88-9	rhodamine B	3

· **NTP (National Toxicology Program)**

None of the ingredients is listed.

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

108-95-2	phenol	A4
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· **Product related hazard information:**

The product has been classified and marked in accordance with regulations on hazardous materials.

· **Hazard symbols:**

T Toxic

· **Hazard-determining components of labeling:**

auramine O
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.

· **National regulations**

· **Technical instructions (air):**

Class	Share in %
I	8.8
III	14.0

· **Water hazard class:** Water hazard class 2 (Self-assessment): hazardous for water.

USA

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Material Safety Data Sheet
acc. to ISO/DIS 11014

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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 cannot guarantee that these are the only hazards that exist.

- **Department issuing MSDS:** Safety and Environment Department
- **Contact:** Technical Service Representative

USA