

07/22/2013

### Kit Components

Product code	Description
<b>212521</b>	<b>TB Fluorescent Stain Set T</b>

Components:

212521a	TB Auramine-Rhodamine T
212521b	TB Decolorizer TM
212521c	TB Potassium Permanganate

Date Prepared: 07/22/2013

Reviewed On: 06/12/2013

**1 Identification**

- **Product Identifier**
- **Product Name:** ***TB Auramine-Rhodamine T***  
***(TB Fluorescent Stain Set T)***
- **Catalog Number:** 212521
- **Relevant identified uses of the substance or mixture and uses advised against**  
No further relevant information available.
- **Application of the substance / the preparation** *In-vitro Diagnostics*
- **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  
Email Address: *Technical\_Services@bd.com*
- **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 Hazard(s) identification**

- **Classification of the substance or mixture**



GHS02 Flame

*Flam. Liq. 3 H226 Flammable liquid and vapour.*

GHS08 Health hazard

*Muta. 2 H341 Suspected of causing genetic defects.**Carc. 2 H351 Suspected of causing cancer.*

GHS05 Corrosion

*Skin Corr. 1B H314 Causes severe skin burns and eye damage.**Acute Tox. 5 H303 May be harmful if swallowed.**Acute Tox. 5 H333 May be harmful if inhaled.*

- **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.*

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**Safety Data Sheet**  
acc. to OSHA HCS

Date Prepared: 07/22/2013

Reviewed On: 06/12/2013

**Product Name: TB Auramine-Rhodamine T**  
**(TB Fluorescent Stain Set T)**

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 **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****GHS label elements**

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

**Hazard pictograms**

GHS02 GHS05 GHS08

**Signal word** Danger**Hazard-determining components of labeling:**

phenol

auramine O

**Hazard statements**

H226 Flammable liquid and vapour.

H303 May be harmful if swallowed.

H333 May be harmful if inhaled.

H314 Causes severe skin burns and eye damage.

H341 Suspected of causing genetic defects.

H351 Suspected of causing cancer.

**Precautionary statements**

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P241 Use explosion-proof electrical/ventilating/lighting/equipment.

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P281 Use personal protective equipment as required.

P240 Ground/bond container and receiving equipment.

P233 Keep container tightly closed.

P242 Use only non-sparking tools.

P243 Take precautionary measures against static discharge.

P264 Wash thoroughly after handling.

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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**Safety Data Sheet**  
 acc. to OSHA HCS

Date Prepared: 07/22/2013

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**Product Name: TB Auramine-Rhodamine T**  
**(TB Fluorescent Stain Set T)**

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- P310 *Immediately call a POISON CENTER or doctor/physician.*
- P321 *Specific treatment (see on this label).*
- P304+P312 *IF INHALED: Call a POISON CENTER or doctor/physician if you feel unwell.*
- P340 *Remove victim to fresh air and keep at rest in a position comfortable for breathing.*
- P363 *Wash contaminated clothing before reuse.*
- P308+P313 *IF exposed or concerned: Get medical advice/attention.*
- P301+P330+P331 *IF SWALLOWED: rinse mouth. Do NOT induce vomiting.*
- P370+P378 *In case of fire: Use for extinction: CO<sub>2</sub>, powder or water spray.*
- P405 *Store locked up.*
- P403+P235 *Store in a well-ventilated place. Keep cool.*
- P501 *Dispose of contents/container in accordance with local/regional/national/international regulations.*

**· NFPA ratings (scale 0-4)**


Health = 3  
 Flammability = 3  
 Reactivity = 0

**· HMIS ratings (scale 0-4)**


HEALTH \*3 Health = \*3  
 FIRE 3 Flammability = 3  
 REACTIVITY 0 Reactivity = 0

- **Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

### 3 Composition/information on ingredients

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

**· Dangerous Components:**

CAS: 67-63-0 EINECS: 200-661-7	isopropanol	Xi R36; F R11 R67	14.0%
CAS: 108-95-2 EINECS: 203-632-7	phenol	T R23/24/25; C R34; Xn R48/20/21/22-68 Muta. Cat. 3	8.8%
CAS: 2465-27-2 EINECS: 219-567-2	auramine O	Xn R22-40; Xi R36	1.2%

- **Additional information** Risk phrases refer to section 15.

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**Product Name: TB Auramine-Rhodamine T**  
**(TB Fluorescent Stain Set T)**

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**4 First-aid measures**

- **Description of 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** *Seek medical treatment 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.*
- **Most important symptoms and effects, both acute and delayed**  
*No further relevant information available.*
- **Indication of any immediate medical attention and special treatment needed**  
*No further relevant information available.*

**5 Fire-fighting measures**

- **Extinguishing media**
- **Suitable extinguishing agents**  
*CO<sub>2</sub>, ABC multipurpose dry chemical 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**
- **Protective equipment:** *No special measures required.*

**6 Accidental release measures**

- **Personal precautions, protective equipment and emergency procedures** *Not required.*
- **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).  
Use neutralizing agent.*
- **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.*

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Date Prepared: 07/22/2013

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**Product Name: TB Auramine-Rhodamine T**  
**(TB Fluorescent Stain Set T)**

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## 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.
- **Conditions for safe storage, including any incompatibilities**
- **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
- **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**

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

**67-63-0 isopropanol**

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

**108-95-2 phenol**

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

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

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 acc. to OSHA HCS

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

- **Information on basic physical and chemical properties**
- **General Information**
- **Appearance:**

<b>Form:</b>	Liquid
<b>Color:</b>	Red
<b>Odor:</b>	Characteristic
- **pH-value:** Alkaline
- **Change in condition**

<b>Melting point/Melting range:</b>	Not determined
<b>Boiling point/Boiling range:</b>	82 °C (180 °F)
- **Flash point:** 30 °C (86 °F)
- **Ignition temperature:** 425.0 °C (797 °F)
- **Auto igniting:** Product is not self igniting.
- **Danger of explosion:** In use, may form flammable/explosive vapour-air mixture.
- **Explosion limits:**

<b>Lower:</b>	4.0 Vol %
<b>Upper:</b>	9.5 Vol %
- **Vapor pressure at 25 °C (77 °F):** 43.0 hPa (32 mm Hg)
- **Density:** Not determined

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**Safety Data Sheet**  
 acc. to OSHA HCS

Date Prepared: 07/22/2013

Reviewed On: 06/12/2013

**Product Name: TB Auramine-Rhodamine T**  
**(TB Fluorescent Stain Set T)**

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- |  |  |
|--|--|
| · <b>Solubility in / Miscibility with Water:</b> | Soluble                                    |
| · <b>Solvent content:</b>                        |  |
| <b>Organic solvents:</b>                         | 14.0 %                                     |
| · <b>Other information</b>                       | No further relevant information available. |

## 10 Stability and reactivity

- **Reactivity**
- **Chemical stability**
- **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:** Incompatible material: strong oxidizers.
- **Hazardous decomposition products:**  
Nitrogen oxides (NO<sub>x</sub>)  
Hydrogen chloride (HCl)  
Carbon dioxide (CO<sub>2</sub>)

## 11 Toxicological information

- **Information on toxicological effects**
- **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)
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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.
- **Additional toxicological information:**  
The product shows the following dangers according to internally approved calculation methods for preparations:  
Toxic  
Corrosive (causes skin burns)

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**Product Name: TB Auramine-Rhodamine T  
(TB Fluorescent Stain Set T)**

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

**· Carcinogenic 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.

**12 Ecological information**

**· Toxicity**

**· 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.

**· Ecotoxicological effects:**

**· Other information:**

The ecological effects have not been thoroughly investigated, but currently none have been identified.

**· Additional ecological information:**

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

**· 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**

Dispose of material in accordance with federal (40 CFR 261.3), state and local requirements. RCRA hazardous waste - RCRA # D001 (ignitable).

Must not be disposed of with solid waste.

**· Uncleaned packagings:**

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

US

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**Safety Data Sheet**  
 acc. to OSHA HCS

Date Prepared: 07/22/2013

Reviewed On: 06/12/2013

**Product Name: TB Auramine-Rhodamine T**  
**(TB Fluorescent Stain Set T)**

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**14 Transport information**

 · **UN-Number**

 · **DOT** UN3316  
 · **ADR, IMDG, IATA** 3316

 · **UN proper shipping name**

 · **DOT, IMDG, IATA** CHEMICAL KITS  
 · **ADR** 3316 CHEMICAL KIT

 · **Transport hazard class(es)**

 · **DOT, IMDG, IATA**

 · **Class** 9 Miscellaneous dangerous substances and articles.

 · **Label** 9

 · **ADR**

 · **Class** 9 (M11) Miscellaneous dangerous substances and articles

 · **Label** 9

 · **Packing group**

 · **DOT, ADR, IMDG, IATA** II

 · **Environmental hazards:**

 · **Marine pollutant:** No

 · **Special precautions for user**

Warning: Miscellaneous dangerous substances and articles

 · **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**

Not applicable.

 · **UN "Model Regulation":**

UN3316, CHEMICAL KITS, 9, II

US

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**Safety Data Sheet**  
 acc. to OSHA HCS

Date Prepared: 07/22/2013

Reviewed On: 06/12/2013

**Product Name: TB Auramine-Rhodamine T**  
**(TB Fluorescent Stain Set T)**

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**15 Regulatory information**

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**

- **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.

- **California Proposition 65 - Chemicals known to cause cancer**

81-88-9	rhodamine B
---------	-------------

- **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.

- **Carcinogenic categories**

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

67-63-0	isopropanol	A4
---------	-------------	----

108-95-2	phenol	A4
----------	--------	----

- **GHS label elements**

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

- **Hazard pictograms**



GHS02 GHS05 GHS08

- **Signal word** Danger

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

phenol

auramine O

- **Hazard statements**

H226 Flammable liquid and vapour.

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**Safety Data Sheet**  
acc. to OSHA HCS

Date Prepared: 07/22/2013

Reviewed On: 06/12/2013

**Product Name: TB Auramine-Rhodamine T**  
**(TB Fluorescent Stain Set T)**

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H303 May be harmful if swallowed.  
H333 May be harmful if inhaled.  
H314 Causes severe skin burns and eye damage.  
H341 Suspected of causing genetic defects.  
H351 Suspected of causing cancer.

**· Precautionary statements**

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.  
P241 Use explosion-proof electrical/ventilating/lighting/equipment.  
P260 Do not breathe dust/fume/gas/mist/vapours/spray.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P281 Use personal protective equipment as required.  
P240 Ground/bond container and receiving equipment.  
P233 Keep container tightly closed.  
P242 Use only non-sparking tools.  
P243 Take precautionary measures against static discharge.  
P264 Wash thoroughly after handling.  
P201 Obtain special instructions before use.  
P202 Do not handle until all safety precautions have been read and understood.  
P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.  
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P310 Immediately call a POISON CENTER or doctor/physician.  
P321 Specific treatment (see on this label).  
P304+P312 IF INHALED: Call a POISON CENTER or doctor/physician if you feel unwell.  
P340 Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
P363 Wash contaminated clothing before reuse.  
P308+P313 IF exposed or concerned: Get medical advice/attention.  
P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.  
P370+P378 In case of fire: Use for extinction: CO<sub>2</sub>, powder or water spray.  
P405 Store locked up.  
P403+P235 Store in a well-ventilated place. Keep cool.  
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

**· National regulations**

- **Water hazard class:** Water hazard class 2 (Self-assessment): hazardous for water.
- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

**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

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**Safety Data Sheet**  
acc. to OSHA HCS

Date Prepared: 07/22/2013

Reviewed On: 06/12/2013

**Product Name: TB Auramine-Rhodamine T**  
**(TB Fluorescent Stain Set T)**

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herein, we can not guarantee that these are the only hazards that exist.

**· Department issuing MSDS:**

Environmental, Health & Safety  
Created by Michael J. Spinazzola

**· Contact: Technical Service Representative****· Abbreviations and acronyms:**

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer  
(Regulations Concerning the International Transport of Dangerous Goods by Rail)

ICAO: International Civil Aviation Organization

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

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

US

Date Prepared: 07/22/2013

Reviewed On: 12/04/2012

**1 Identification**

- **Product Identifier**
- **Product Name:** *TB Decolorizer TM*  
*(TB Fluorescent Stain Set T)*
- **Catalog Number:** 212521
- **Relevant identified uses of the substance or mixture and uses advised against**  
No further relevant information available.
- **Application of the substance / the preparation** *In-vitro Diagnostics*
- **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  
Email Address: *Technical\_Services@bd.com*
- **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 Hazard(s) identification**

- **Classification of the substance or mixture**



GHS02 Flame

*Flam. Liq. 2 H225 Highly flammable liquid and vapour.*

GHS05 Corrosion

*Skin Corr. 1C H314 Causes severe skin burns and eye damage.*

GHS07

*Eye Irrit. 2A H319 Causes serious eye irritation.**STOT SE 3 H336 May cause drowsiness or dizziness.*

- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**



C; Corrosive

*R34: Causes burns.*

F; Highly flammable

*R11: Highly flammable.*

- **Information concerning particular hazards for human and environment:**

*Has a narcotizing effect.*

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## Safety Data Sheet

acc. to OSHA HCS

Date Prepared: 07/22/2013

Reviewed On: 12/04/2012

**Product Name: TB Decolorizer TM**  
**(TB Fluorescent Stain Set T)**

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· **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**

· **GHS label elements**

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

· **Hazard pictograms**



GHS02 GHS05 GHS07

· **Signal word** *Danger*

· **Hazard statements**

H225 Highly flammable liquid and vapour.

H314 Causes severe skin burns and eye damage.

H336 May cause drowsiness or dizziness.

· **Precautionary statements**

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P241 Use explosion-proof electrical/ventilating/lighting/equipment.

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

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

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P240 Ground/bond container and receiving equipment.

P233 Keep container tightly closed.

P242 Use only non-sparking tools.

P243 Take precautionary measures against static discharge.

P264 Wash thoroughly after handling.

P271 Use only outdoors or in a well-ventilated area.

P303+P361+P353 **IF ON SKIN (or hair):** Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

P305+P351+P338 **IF IN EYES:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER or doctor/physician.

P321 Specific treatment (see on this label).

P304+P340 **IF INHALED:** Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P312 Call a POISON CENTER or doctor/physician if you feel unwell.

P363 Wash contaminated clothing before reuse.

P337+P313 If eye irritation persists: Get medical advice/attention.

P301+P330+P331 **IF SWALLOWED:** rinse mouth. Do NOT induce vomiting.

P370+P378 In case of fire: Use for extinction: CO<sub>2</sub>, powder or water spray.

P405 Store locked up.

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P403+P235 Store in a well-ventilated place. Keep cool.

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**Safety Data Sheet**  
 acc. to OSHA HCS

Date Prepared: 07/22/2013

Reviewed On: 12/04/2012

**Product Name: TB Decolorizer TM**  
**(TB Fluorescent Stain Set T)**

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P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

**· NFPA ratings (scale 0-4)**

 Health = 2  
 Flammability = 3  
 Reactivity = 0

**· HMIS ratings (scale 0-4)**

 Health = 2  
 Flammability = 3  
 Reactivity = 0

- **Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

### 3 Composition/information on ingredients

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

**· Dangerous Components:**

CAS: 67-63-0	isopropanol	Xi R36; F R11	70.0%
EINECS: 200-661-7		R67	

- **Additional information** Risk phrases refer to section 15.

### 4 First-aid measures

- **Description of 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** Seek medical treatment 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.
- **Most important symptoms and effects, both acute and delayed**  
No further relevant information available.

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**Product Name: TB Decolorizer TM**  
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- **Indication of any immediate medical attention and special treatment needed**  
No further relevant information available.

**5 Fire-fighting measures**

- **Extinguishing media**
- **Suitable extinguishing agents**  
CO<sub>2</sub>, ABC multipurpose dry chemical 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**
- **Protective equipment:** No special measures required.

**6 Accidental release measures**

- **Personal precautions, protective equipment and emergency procedures** Not required.
- **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).  
Use neutralizing agent.
- **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.
- **Conditions for safe storage, including any incompatibilities**
- **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.
- **Further information about storage conditions:**  
Store in cool, dry conditions in well sealed containers.

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- **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**

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

### 67-63-0 isopropanol

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

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

- **Exposure controls**

- **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.

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

- **Information on basic physical and chemical properties**

- **General Information**

- **Appearance:**

<b>Form:</b>	Liquid
<b>Color:</b>	Colorless
<b>Odor:</b>	Characteristic

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· <b>pH-value:</b>	1.3 - 1.9
· <b>Change in condition</b>	
<b>Melting point/Melting range:</b>	Not determined
<b>Boiling point/Boiling range:</b>	82 °C (180 °F)
· <b>Flash point:</b>	16.7 °C (62 °F)
· <b>Ignition temperature:</b>	425.0 °C (797 °F)
· <b>Auto igniting:</b>	Product is not self igniting.
· <b>Danger of explosion:</b>	Product is not explosive. However, formation of explosive air/vapor mixtures are possible.
· <b>Explosion limits:</b>	
<b>Lower:</b>	3.0 Vol %
<b>Upper:</b>	12.0 Vol %
· <b>Vapor pressure at 25 °C (77 °F):</b>	43.0 hPa (32 mm Hg)
· <b>Density at 25 °C (77 °F):</b>	1.53 g/cm <sup>3</sup>
· <b>Solubility in / Miscibility with Water:</b>	Soluble
· <b>Solvent content:</b>	
<b>Organic solvents:</b>	70.0 %
· <b>Other information</b>	No further relevant information available.

## 10 Stability and reactivity

- **Reactivity**
- **Chemical stability**
- **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:** No further relevant information available.
- **Hazardous decomposition products:**  
Hydrogen chloride (HCl)  
Carbon dioxide (CO<sub>2</sub>)

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**11 Toxicological information**· **Information on toxicological effects**· **Acute toxicity:**· **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:

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.

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

67-63-0	isopropanol	3
7647-01-0	hydrochloric acid	3

· **NTP (National Toxicology Program)**

None of the ingredients is listed.

**12 Ecological information**· **Toxicity**· **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:** Water hazard class 1 (Self-assessment): slightly hazardous for water.· **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**

Dispose of material in accordance with federal (40 CFR 261.3), state and local requirements.  
RCRA hazardous waste - RCRA # D001 (ignitable).

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 RCRA hazardous waste - RCRA # D002 (corrosive).  
 Must not be disposed of with solid waste.

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

**14 Transport information**

 · **UN-Number**

· DOT	UN3316
· ADR, IMDG, IATA	3316

 · **UN proper shipping name**

· DOT, IMDG, IATA	CHEMICAL KITS
· ADR	3316 CHEMICAL KIT

 · **Transport hazard class(es)**

 · **DOT, IMDG, IATA**


· <b>Class</b>	9 Miscellaneous dangerous substances and articles.
----------------	--

· <b>Label</b>	9
----------------	---

 · **ADR**


· <b>Class</b>	9 (M11) Miscellaneous dangerous substances and articles
----------------	---

· <b>Label</b>	9
----------------	---

 · **Packing group**

· DOT, ADR, IMDG, IATA	II
------------------------	----

 · **Environmental hazards:**

· <b>Marine pollutant:</b>	No
----------------------------	----

· <b>Special precautions for user</b>	Warning: Miscellaneous dangerous substances and articles
---------------------------------------	--

· <b>Danger code (Kemler):</b>	33
--------------------------------	----

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- |  |                              |
|--|------------------------------|
| · <b>EMS Number:</b>   | F-A, <u>S</u> -P             |
| · <b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b> | Not applicable.              |
| · <b>UN "Model Regulation":</b>  | UN3316, CHEMICAL KITS, 9, II |

**15 Regulatory information**

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**

- **SARA Section 355 (extremely hazardous substances)**

7647-01-0	hydrochloric acid
-----------	-------------------

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

67-63-0	isopropanol
---------	-------------

7647-01-0	hydrochloric acid
-----------	-------------------

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

All ingredients are listed.

- **California Proposition 65 - Chemicals known to cause cancer**

None of the ingredients is listed.

- **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.

- **Carcinogenic categories**

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

67-63-0	isopropanol	A4
---------	-------------	----

7647-01-0	hydrochloric acid	A4
-----------	-------------------	----

- **GHS label elements**

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

- **Hazard pictograms**



GHS02 GHS05 GHS07

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**· Signal word** Danger**· Hazard statements***H225 Highly flammable liquid and vapour.**H314 Causes severe skin burns and eye damage.**H336 May cause drowsiness or dizziness.***· Precautionary statements***P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.**P241 Use explosion-proof electrical/ventilating/lighting/equipment.**P260 Do not breathe dust/fume/gas/mist/vapours/spray.**P261 Avoid breathing dust/fume/gas/mist/vapours/spray.**P280 Wear protective gloves/protective clothing/eye protection/face protection.**P240 Ground/bond container and receiving equipment.**P233 Keep container tightly closed.**P242 Use only non-sparking tools.**P243 Take precautionary measures against static discharge.**P264 Wash thoroughly after handling.**P271 Use only outdoors or in a well-ventilated area.**P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.**P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.**P310 Immediately call a POISON CENTER or doctor/physician.**P321 Specific treatment (see on this label).**P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.**P312 Call a POISON CENTER or doctor/physician if you feel unwell.**P363 Wash contaminated clothing before reuse.**P337+P313 If eye irritation persists: Get medical advice/attention.**P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.**P370+P378 In case of fire: Use for extinction: CO<sub>2</sub>, powder or water spray.**P405 Store locked up.**P403+P233 Store in a well-ventilated place. Keep container tightly closed.**P403+P235 Store in a well-ventilated place. Keep cool.**P501 Dispose of contents/container in accordance with local/regional/national/international regulations.***· Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.**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.

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**· Department issuing MSDS:***Environmental, Health & Safety*  
*Created by Michael J. Spinazzola***· Contact:** *Technical Service Representative***· Abbreviations and acronyms:***RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer*  
*(Regulations Concerning the International Transport of Dangerous Goods by Rail)**ICAO: International Civil Aviation Organization**ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)**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)*

US




Date Prepared: 07/22/2013

Reviewed On: 06/12/2013

## 1 Identification

- **Product Identifier**
- **Product Name:** TB Potassium Permanganate  
(TB Fluorescent Stain Set T)
- **Catalog Number:** 212521
- **Relevant identified uses of the substance or mixture and uses advised against**  
No further relevant information available.
- **Application of the substance / the preparation** *In-vitro Diagnostics*
- **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  
Email Address: [Technical\\_Services@bd.com](mailto:Technical_Services@bd.com)
- **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 Hazard(s) identification

- **Classification of the substance or mixture**  
*Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.*
- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**  
 Xi; Irritant  
*R36/37/38: Irritating to eyes, respiratory system and skin.*
- **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**
- **GHS label elements**  
*The product is classified and labeled according to the Globally Harmonized System (GHS).*
- **Hazard pictograms** Void
- **Signal word** Void
- **Hazard statements**  
*H412 Harmful to aquatic life with long lasting effects.*
- **Precautionary statements**  
*P273 Avoid release to the environment.*  
*P501 Dispose of contents/container in accordance with local/regional/national/international regulations.*
- **NFPA ratings (scale 0-4)**



Health = 1  
Flammability = 0  
Reactivity = 0

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**Product Name: TB Potassium Permanganate  
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· **HMIS ratings (scale 0-4)**

HEALTH	1	Health = 1
FIRE	0	Flammability = 0
REACTIVITY	0	Reactivity = 0

- **Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

### 3 Composition/information on ingredients

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

· **Dangerous Components:**

CAS: 7722-64-7	potassium permanganate	Xn R22; O R8; N R50/53	0.5%
EINECS: 231-760-3			

- **Additional information** Risk phrases refer to section 15.

### 4 First-aid measures

- **Description of 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** Seek medical treatment 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.
- **Most important symptoms and effects, both acute and delayed**  
No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed**  
No further relevant information available.

### 5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents**  
CO<sub>2</sub>, ABC multipurpose dry chemical or water spray. Fight larger fires with water spray or alcohol resistant foam.

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- **Special hazards arising from the substance or mixture**  
*In certain fire conditions, traces of other toxic gases cannot be excluded.*
- **Advice for firefighters**
- **Protective equipment:** *No special measures required.*

**6 Accidental release measures**

- **Personal precautions, protective equipment and emergency procedures** *Not required.*
- **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:**  
*No special measures required.*
- **Conditions for safe storage, including any incompatibilities**
- **Storage**
- **Requirements to be met by storerooms and receptacles:** *15 - 30 °C*
- **Information about storage in one common storage facility:**  
*Store away from reducing agents.*  
*Do not store together with acids.*
- **Further information about storage conditions:**  
*Store in cool, dry conditions in well sealed containers.*
- **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**
- **Components with limit values that require monitoring at the workplace:**  
*The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.*
- **Additional information:** *The lists that were valid during the creation were used as basis.*

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- **Exposure controls**
- **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.  
 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

- **Information on basic physical and chemical properties**
- **General Information**
- **Appearance:**

<b>Form:</b>	Liquid
<b>Color:</b>	Brown
<b>Odor:</b>	Characteristic
- **Change in condition**

<b>Melting point/Melting range:</b>	Not determined
<b>Boiling point/Boiling range:</b>	Not determined
- **Flash point:** Not applicable
- **Danger of explosion:** Product does not present an explosion hazard.
- **Density:** Not determined
- **Solubility in / Miscibility with Water:** Soluble
- **Solvent content:**

<b>Organic solvents:</b>	0.0 %
--------------------------	-------
- **Other information** No further relevant information available.

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(TB Fluorescent Stain Set T)**

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**10 Stability and reactivity**

- **Reactivity**
- **Chemical stability**
- **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:**  
Incompatible materials: AL4C3, AS, DMSO, ethylene glycol, glycerin, H2O2, H2S3, HCL, H2SO4, ammonia, NO3, P, S, Sb, Ti, organic matter.
- **Hazardous decomposition products:** Irritant gases/vapors

**11 Toxicological information**

- **Information on toxicological effects**
- **Acute toxicity:**
- **LD/LC50 values that are relevant for classification:**  
**7722-64-7 potassium permanganate**

Oral	LD50	1090 mg/kg (rat)
------	------	------------------
- **Primary irritant effect:**
  - **on the skin:** Irritant to skin and mucous membranes.
  - **on the eye:** Irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**  
The product shows the following dangers according to internally approved calculation methods for preparations:  
Irritant

- **Carcinogenic categories**

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

None of the ingredients is listed.

- **NTP (National Toxicology Program)**

None of the ingredients is listed.

**12 Ecological information**

- **Toxicity**
- **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.

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- **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:** Water hazard class 2 (Self-assessment): hazardous for water.
- **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**  
Dispose of material in accordance with federal (40 CFR 261.3), state and local requirements.  
This product is not considered a RCRA hazardous waste.  
Must not be disposed of with solid waste.
- **Uncleaned packagings:**
- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

### 14 Transport information

- |  |                 |
|--|-----------------|
| · <b>UN-Number</b>   |                 |
| · <b>DOT, ADR, ADN, IMDG, IATA</b>   | Void            |
| · <b>UN proper shipping name</b>   |                 |
| · <b>DOT, ADR, ADN, IMDG, IATA</b>   | Void            |
| · <b>Transport hazard class(es)</b>  |                 |
| · <b>DOT, ADR, ADN, IMDG, IATA</b>   |                 |
| · <b>Class</b>   | Void            |
| · <b>Packing group</b>   |                 |
| · <b>DOT, ADR, IMDG, IATA</b>  | Void            |
| · <b>Environmental hazards:</b>  |                 |
| · <b>Marine pollutant:</b>   | No              |
| · <b>Special precautions for user</b>  | Not applicable. |
| · <b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b> | Not applicable. |
| · <b>UN "Model Regulation":</b>  | -               |

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**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 is listed.

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

7722-64-7 | potassium permanganate

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

All ingredients are listed.

· **California Proposition 65 - Chemicals known to cause cancer**

None of the ingredients is listed.

· **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.

· **Carcinogenic categories**

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

None of the ingredients is listed.

· **GHS label elements**

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

· **Hazard pictograms** Void

· **Signal word** Void

· **Hazard statements**

H412 Harmful to aquatic life with long lasting effects.

· **Precautionary statements**

P273 Avoid release to the environment.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· **National regulations**

· **Additional classification according to Decree on Hazardous Materials:**

CERCLA: This product contains potassium Permanganate which has a Reporting Quantity (RQ) of 100 lbs.

SARA 311/312: May be subject to reporting.

313: Not subject to reporting.

TSCA: This product is exempt under TSCA.

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

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· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.**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 & Safety  
Created by Michael J. Spinazzola

· **Contact:** Technical Service Representative· **Abbreviations and acronyms:**

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer  
(Regulations Concerning the International Transport of Dangerous Goods by Rail)

ICAO: International Civil Aviation Organization

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

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