

1 Identification of substance:

- **Product name:** TB Carbofuchsin KF
(TB Stain Set K)
- **Catalog number:** 212522
- **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	19.6%
108-95-2	phenol	4.9%
64-17-5	ethanol	4.7%
569-61-9	basic fuchsin	1.5%

3 Hazards identification

- **Hazard description:**



T Toxic

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

R 45 May cause cancer.
R 10 Flammable.
R 21/22 Harmful in contact with skin and if swallowed.
R 36/38 Irritating to eyes and skin.
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

Product name: TB Carbofuchsin KF
(TB Stain Set K)

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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** 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** Immediately call a doctor.
- **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.
- **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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Product name: TB Carbofuchsin KF
(TB Stain Set K)

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

67-63-0 isopropanol

PEL 980 mg/m³, 400 ppm
REL Short-term value: 1225 mg/m³, 500 ppm
Long-term value: 980 mg/m³, 400 ppm
TLV Short-term value: 984 mg/m³, 400 ppm
Long-term value: 492 mg/m³, 200 ppm

108-95-2 phenol

PEL 19 mg/m³, 5 ppm
Skin
REL Short-term value: C 60* mg/m³, C 15.6* ppm
Long-term value: 19 mg/m³, 5 ppm
*15-min
TLV 19 mg/m³, 5 ppm
Skin; BEI

64-17-5 ethanol

PEL 1900 mg/m³, 1000 ppm
REL 1900 mg/m³, 1000 ppm
TLV 1880 mg/m³, 1000 ppm

· 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.
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: Dark red
Odor: Characteristic

· Change in condition

Melting point/Melting range: Not determined

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Product name: TB Carbofuchsin KF
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Boiling point/Boiling range:	Not determined
· Flash point:	29.4°C (85°F)
· Ignition temperature:	425.0°C (797°F)
· Auto igniting:	Product is not self igniting.
· Danger of explosion:	Product is not explosive. However, formation of explosive air/vapor mixtures are possible.
· Explosion limits:	
Lower:	1.7 Vol %
Upper:	18 Vol %
· Vapor pressure at 25°C (77°F):	43.0 hPa (32 mm Hg)
· Density:	Not determined
· Solubility in / Miscibility with Water:	Soluble
· Solvent content:	
Organic solvents:	29 %

10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.
- **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)
64-17-5 ethanol		
Oral	LD50	3450 mg/kg (MOU) 7060 mg/kg (rat)
569-61-9 basic fuchsin		
Oral	LD50	500 mg/kg (mou)

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Product name: TB Carbofuchsin KF
(TB Stain Set K)

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67-63-0 isopropanol

Oral	LD50	5045 mg/kg (rat)
Dermal	LD50	12800 mg/kg (rab)

- **Primary irritant effect:**
 - **on the skin:** Irritant to skin and mucous membranes.
 - **on the eye:** Irritating effect.
 - **Sensitization:** No sensitizing effects known.
 - **Subacute to chronic toxicity:** Target organs: reproductive disorders, and tumor formation.
 - **Additional toxicological information:**
- Irritant
The product shows the following dangers according to internally approved calculation methods for preparations:

12 Ecological information:

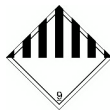
- **General notes:** Water hazard class 2 (Self-assessment): hazardous for water.

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 KIT
- **Label** 9

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Product name: TB Carbofuchsin KF
(TB Stain Set K)

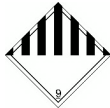
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· **Land transport ADR/RID (cross-border)**



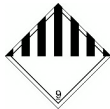
· **ADR/RID class:** 9 (M11) Miscellaneous dangerous substances and articles
 · **UN-Number:** 3316
 · **Packaging group:** III
 · **Description of goods:** 3316 CHEMICAL KITS

· **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 KIT

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



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

15 Regulations

· **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

64-17-5 ethanol

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

67-63-0 isopropanol

108-95-2 phenol

64-17-5 ethanol

569-61-9 basic fuchsin

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

569-61-9 basic fuchsin

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Product name: TB Carbofuchsin KF
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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:

64-17-5	ethanol
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· Carcinogenicity categories

· IARC (International Agency for Research on Cancer)

67-63-0	isopropanol	3
108-95-2	phenol	3
569-61-9	basic fuchsin	2B

· NTP (National Toxicology Program)

569-61-9	basic fuchsin	R
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· TLV (Threshold Limit Value established by ACGIH)

108-95-2	phenol	A4
64-17-5	ethanol	A4

· 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:

ethanol
basic fuchsin
phenol

· Risk phrases:

45 May cause cancer.
10 Flammable.
21/22 Harmful in contact with skin and if swallowed.
36/38 Irritating to eyes and skin.
40 Limited evidence of a carcinogenic effect.

· Safety phrases:

53 Avoid exposure - obtain special instructions before use.
36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
43 In case of fire, use water or powdered extinguishing agent
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	4.9
III	24.3

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· **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 cannot guarantee that these are the only hazards that exist.

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

USA

1 Identification of substance:

- **Product name:** *TB Decolorizer*
(TB Stain Set K)
- **Catalog number:** 212522
- **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:		
64-17-5	ethanol	92.3%
67-56-1	methanol	4.7%
7647-01-0	hydrochloric acid	3.0%

3 Hazards identification

- **Hazard description:**



Xn Harmful
F Highly flammable

- **Information pertaining to particular dangers for man and environment**
R 11 Highly flammable.
R 20/21/22 Harmful by inhalation, in contact with skin and if swallowed.
R 40 Limited evidence of a carcinogenic effect.
R 68/20/21/22 Harmful: possible risk of irreversible effects through inhalation, in contact with skin and if swallowed.
- **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 = 4
Fire = 3
Reactivity = 0

Product name: TB Decolorizer
(TB Stain Set K)

(Contd. of page 1)

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** 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** Immediately call a doctor.
- **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:** Not required.
- **Further information about storage conditions:**
Keep receptacle tightly sealed.
Store in cool, dry conditions in well sealed containers.

8 Exposure controls and personal protection

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

(Contd. on page 3)

**Product name: TB Decolorizer
(TB Stain Set K)**

(Contd. of page 2)

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

64-17-5 ethanol

PEL 1900 mg/m³, 1000 ppm
REL 1900 mg/m³, 1000 ppm
TLV 1880 mg/m³, 1000 ppm

67-56-1 methanol

PEL 260 mg/m³, 200 ppm
REL Short-term value: 325 mg/m³, 250 ppm
Long-term value: 260 mg/m³, 200 ppm
Skin
TLV Short-term value: 328 mg/m³, 250 ppm
Long-term value: 262 mg/m³, 200 ppm
Skin; BEI

7647-01-0 hydrochloric acid

PEL Short-term value: C 7 mg/m³, C 5 ppm
REL Short-term value: C 7 mg/m³, C 5 ppm
TLV Short-term value: C 2.98 mg/m³, C 2 ppm

· **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.
Wash hands before breaks and at the end of work.

· **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: Clear
Odor: Characteristic

· **Change in condition**

Melting point/Melting range: Not determined
Boiling point/Boiling range: 78°C (172°F)

· **Flash point:** 15.5°C (60°F)

· **Ignition temperature:** 425.0°C (797°F)

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**Product name: TB Decolorizer
(TB Stain Set K)**

(Contd. of page 3)

· Auto igniting:	Product is not self igniting.
· Danger of explosion:	Product is not explosive. However, formation of explosive air/vapor mixtures are possible.
· Explosion limits:	
Lower:	3.8 Vol %
Upper:	13.5 Vol %
· Vapor pressure at 25°C (77°F):	59.0 hPa (44 mm Hg)
· Density at 25°C (77°F):	1.53 g/cm ³
· Solubility in / Miscibility with	
Water:	Soluble
· Solvent content:	
Organic solvents:	97.0 %

10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.
- **Dangerous reactions** No dangerous reactions known
- **Dangerous products of decomposition:**
Carbon dioxide (CO₂)
Hydrogen chloride (HCl)

11 Toxicological information

· **Acute toxicity:**

· **LD/LC50 values that are relevant for classification:**

64-17-5 ethanol		
Oral	LD50	3450 mg/kg (MOU)
		7060 mg/kg (rat)
67-56-1 methanol		
Oral	LD50	5628 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.
- **Subacute to chronic toxicity:** Target organs: liver, gastrointestinal tumors, blood, lymphomas.
- **Additional toxicological information:**
Product is suspected to cause birth defects.
Harmful

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Printing date 01/11/2006

Reviewed on 12/03/2003

Product name: TB Decolorizer
(TB Stain Set K)

(Contd. of page 4)

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

12 Ecological information:

- **General notes:** Water hazard class 1 (Self-assessment): slightly 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:** II
- **Proper shipping name:** CHEMICAL KITS
- **Label:** 9

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



- **ADR/RID class:** 9 (M11) Miscellaneous dangerous substances and articles
- **Danger code (Kemler):** 33
- **UN-Number:** 3316
- **Packaging group:** II
- **Description of goods:** 3316 CHEMICAL KITS

(Contd. on page 6)

USA

Product name: TB Decolorizer
(TB Stain Set K)

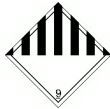
(Contd. of page 5)

· Maritime transport IMDG:



- **IMDG Class:** 9
- **UN Number:** 3316
- **Label** 9
- **Packaging group:** II
- **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:** II
- **Proper shipping name:** CHEMICAL KITS

15 Regulations

· SARA Section 355 (extremely hazardous substances)

7647-01-0 | hydrochloric acid

· SARA Section 313 (specific toxic chemical listings)

All ingredients are listed.

· 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:

64-17-5 | ethanol

· Carcinogenicity categories

· IARC (International Agency for Research on Cancer)

7647-01-0 | hydrochloric acid

3

· NTP (National Toxicology Program)

None of the ingredients is listed.

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Reviewed on 12/03/2003

Product name: TB Decolorizer
(TB Stain Set K)

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· TLV (Threshold Limit Value established by ACGIH)

64-17-5	ethanol	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:

Xn Harmful

F Highly flammable

· Hazard-determining components of labeling:

ethanol

methanol

hydrochloric acid

· Risk phrases:

11 Highly flammable.

20/21/22 Harmful by inhalation, in contact with skin and if swallowed.

40 Limited evidence of a carcinogenic effect.

68/20/21/22 Harmful: possible risk of irreversible effects through inhalation, in contact with skin and if swallowed.

· Safety phrases:

7/9 Keep container tightly closed and in a well-ventilated place.

16 Keep away from sources of ignition - No smoking.

36/37 Wear suitable protective clothing and gloves.

60 This material and its container must be disposed of as hazardous waste.

· National regulations

· Additional classification according to Decree on Hazardous Materials:

CERCLA: This product contains Hydrochloric Acid and Methanol which have a Reporting Quantity (RQ) of 5000 lbs. for each.

SARA 311/312: Subject to reporting.

313: Hydrochloric Acid and Methanol are subject to reporting.

TSCA: This product is exempt under TSCA.

· Technical instructions (air):

Class	Share in %
III	97.0

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

1 Identification of substance:

- **Product name:** TB Brilliant Green K
(TB Stain Set K)
- **Catalog number:** 212522
- **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:**
- **CAS No. Description:**
Not applicable
- **Identification number(s):**
- **EINECS Number:** 2317912
- **Chemical characterization**
- **Description:** Mixture consisting of the following components.

· **Dangerous components:**

633-03-4	brilliant green	0.2%
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3 Hazards identification

· **Hazard description:**



Xn Harmful

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

R 20/21/22 Harmful by inhalation, in contact with skin and if swallowed.

· **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 = 2
Fire = 0
Reactivity = 0

Product name: TB Brilliant Green K
(TB Stain Set K)

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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** 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** Immediately call a doctor.
- **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.

· **Special hazards caused by the material, its products of combustion or resulting gases:**

In certain fire conditions, traces of other toxic gases cannot be excluded.

- **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:** No special measures required.

· **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:** The product is not flammable

· **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 acids.

Store away from oxidizing agents.

Store away from metals.

Store away from organic material, and chlorinated solvents.

- **Further information about storage conditions:** Store in cool, dry conditions in well sealed containers.

8 Exposure controls and personal protection

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

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Product name: TB Brilliant Green K
(TB Stain Set K)

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- **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.
- **Personal Protective Equipment**
- **General protective and hygienic measures**
The usual precautionary measures for handling chemicals should be followed.
- **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:	Green
Odor:	Odorless

· Change in condition	Undetermined
· Melting point/Melting range:	0°C (32°F)
· Boiling point/Boiling range:	100°C (212°F)

· Flash point:	Not applicable
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· Danger of explosion:	Product does not present an explosion hazard.
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· Vapor pressure at 25°C (77°F):	23 hPa (17 mm Hg)
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· Density at 25°C (77°F):	0.99 g/cm ³
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· Solubility in / Miscibility with Water:	Soluble
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10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.
- **Dangerous reactions** No dangerous reactions known
- **Dangerous products of decomposition:**
Carbon monoxide (CO) and carbon dioxide (CO₂)
Nitrogen oxides (NO_x)

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Product name: TB Brilliant Green K
(TB Stain Set K)Sulfur oxides (SO_x)

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11 Toxicological information

- **Acute toxicity:**
- **Primary irritant effect:**
 - **on the skin:** Irritant to skin and mucous membranes.
 - **on the eye:** Irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Subacute to chronic toxicity:** Target organs: respiratory system, gastrointestinal, eyes and skin.
- **Additional toxicological information:**
Harmful
The product shows the following dangers according to internally approved calculation methods for preparations:

12 Ecological information:

- **Ecotoxic effects:**
- **Other information:**
The ecological effects have not been thoroughly investigated, but currently none have been identified.
- **General notes:** Water hazard class 1 (Self-assessment): slightly 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.
This product is not considered a RCRA hazardous waste.
- **Uncleaned packagings:**
- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

14 Transport information

- **DOT regulations:**
- **Hazard class:** -
- **Land transport ADR/RID (cross-border)**
- **ADR/RID class:** -
- **Maritime transport IMDG:**
- **IMDG Class:** -
- **Marine pollutant:** No

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USA

Product name: TB Brilliant Green K
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- **Air transport ICAO-TI and IATA-DGR:**
- **ICAO/IATA Class:** -

15 Regulations

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

None of the ingredients is listed.

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

None of the ingredients is listed.

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

633-03-4 brilliant green

1310-73-2 sodium hydroxide

- **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.

- **Carcinogenicity categories**

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

None of the ingredients is listed.

- **NTP (National Toxicology Program)**

None of the ingredients is listed.

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

None of the ingredients is listed.

- **Product related hazard information:**

Observe the general safety regulations when handling chemicals

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

- **Hazard symbols:**

Xn Harmful

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

brilliant green

- **Risk phrases:**

20/21/22 Harmful by inhalation, in contact with skin and if swallowed.

- **Safety phrases:**

26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

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Material Safety Data Sheet
acc. to ISO/DIS 11014

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36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

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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