

Date Prepared: 01/27/2007

Reviewed On: 01/08/2007

1 Identification of substance:

- **Product name:** Gram Safranin
- **Catalog number:** 212531
- **Manufacturer/Supplier:**
 BD Diagnostic Systems
 7 Loveton Circle
 Sparks, MD 21152
 Telephone: (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	19.0%
67-56-1	methanol	1.0%

3 Hazards identification

- **Hazard description:**



Xn Harmful

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

R 10 Flammable.

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.

- **HMIS ratings (scale 0-4)**

HEALTH	0	Health = *0
FIRE	2	Fire = 2
REACTIVITY	0	Reactivity = 0

4 First aid measures

- **General information**

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

- **After inhalation** 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.

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- **The following symptoms may occur:**
- Dizziness
- Headache

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

64-17-5 ethanol

EL (Canada (English))	1000 ppm
PEL (USA)	1900 mg/m ³ , 1000 ppm
REL (USA)	1900 mg/m ³ , 1000 ppm
TLV (USA)	1880 mg/m ³ , 1000 ppm

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67-56-1 methanol

<i>EL (Canada (English))</i>	Short-term value: 250 ppm Long-term value: 200 ppm Skin
<i>PEL (USA)</i>	260 mg/m ³ , 200 ppm
<i>REL (USA)</i>	Short-term value: 325 mg/m ³ , 250 ppm Long-term value: 260 mg/m ³ , 200 ppm Skin
<i>TLV (USA)</i>	Short-term value: 328 mg/m ³ , 250 ppm Long-term value: 262 mg/m ³ , 200 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.
- 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: 79°C

· **Flash point:** 38.9°C

· **Ignition temperature:** 425.0°C

· **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:	6.5 Vol %
Upper:	22 Vol %

· **Vapor pressure at 25°C:** 59.0 hPa

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· **Density:** *Not determined*

· **Solubility in / Miscibility with Water:** *Soluble*

· **Solvent content:**
Organic solvents: *20.0 %*

10 Stability and reactivity

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

Harmful

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

12 Ecological information:

- **Ecotoxic effects:**
- **Acquatic toxicity:**
This material is not expected to be toxic to aquatic life. The LC50/96-hour values for fish are greater than 100 mg/l
- **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.

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Must adhere to official regulations.

- **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

· **Maritime transport IMDG:**

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

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

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

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15 Regulations

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

None of the ingredients is listed.

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

64-17-5 ethanol

67-56-1 methanol

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

64-17-5 ethanol

67-56-1 methanol

· **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)**

None of the ingredients is listed.

· **NTP (National Toxicology Program)**

None of the ingredients is listed.

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

64-17-5 ethanol

A4

· **Product related hazard information:**

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

· **Hazard symbols:**

Xn Harmful

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

ethanol

methanol

· **Risk phrases:**

10 Flammable.

40 Limited evidence of a carcinogenic effect.

· **Safety phrases:**

7 Keep container tightly closed.

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.

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· **National regulations**· **Technical instructions (air):**

Class	Share in %
Water	79.0
III	20.0

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 can not guarantee that these are the only hazards that exist.

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

CDN