1 Identification

- **Product Identifier:**
- **Product Name:** Gram Safranin
- **Catalog Number:** 212532
- **Application of the substance / the mixture** Laboratory Chemicals

- **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 vapor.

- **Label elements**
  - **GHS label elements**
    The product is classified and labeled according to the Globally Harmonized System (GHS).
  - **Hazard pictograms**
    - GHS02

- **Signal word** Warning

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

- **Hazard statements**
  - H226 Flammable liquid and vapor.

- **Precautionary statements**
  - P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.
  - P241 Use explosion-proof electrical/ventilating/lighting/equipment.
  - P280 Wear protective gloves / eye protection / face protection.
  - P240 Ground/bond container and receiving equipment.

(Contd. on page 2)
**Product Name: Gram Safranin**

- **P233** Keep container tightly closed.
- **P242** Use only non-sparking tools.
- **P243** Take precautionary measures against static discharge.
- **P303+P361+P353** If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
- **P370+P378** In case of fire: Use for extinction: CO2, powder or water spray.
- **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 = 0
  - Flammability = 2
  - Reactivity = 0

- **HMIS ratings (scale 0-4)**
  - Health = *0
  - Flammability = 2
  - 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.

<table>
<thead>
<tr>
<th>Dangerous Components</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS: 64-17-5</td>
<td>ethanol</td>
</tr>
<tr>
<td>EINECS: 200-578-6</td>
<td>19.0%</td>
</tr>
<tr>
<td>Flam. Liq. 2, H225</td>
<td></td>
</tr>
<tr>
<td>CAS: 67-56-1</td>
<td>methanol</td>
</tr>
<tr>
<td>EINECS: 200-659-6</td>
<td>1.0%</td>
</tr>
<tr>
<td>Flam. Liq. 2, H225; Acute Tox. 3, H301; Acute Tox. 3, H311; Acute Tox. 3, H331; STOT SE 1, H370</td>
<td></td>
</tr>
</tbody>
</table>

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

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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.

(Contd. on page 3)
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· 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 SDS.
· Most important symptoms and effects, both acute and delayed  
  Dizziness  
  Headache
· Indication of any immediate medical attention and special treatment needed  
  No further relevant information available.

5 Fire-fighting measures

· Extinguishing media
· Suitable extinguishing agents  
  CO2, 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).
· 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.
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- Conditions for safe storage, including any incompatibilities
  - Storage
  - Requirements to be met by storerooms and receptacles: No special requirements.
  - 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.
  - Storage class II A
  - 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

<table>
<thead>
<tr>
<th>Component</th>
<th>PEL</th>
<th>REL</th>
<th>TLV</th>
</tr>
</thead>
<tbody>
<tr>
<td>64-17-5 ethanol</td>
<td>1900 mg/m³, 1000 ppm</td>
<td>1900 mg/m³, 1000 ppm</td>
<td>1880 mg/m³, 1000 ppm</td>
</tr>
<tr>
<td>67-56-1 methanol</td>
<td>260 mg/m³, 200 ppm</td>
<td>Short-term value: 325 mg/m³, 250 ppm</td>
<td>Long-term value: 260 mg/m³, 200 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Skin</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Short-term value: 328 mg/m³, 250 ppm</td>
<td>Long-term value: 262 mg/m³, 200 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Skin; BEI</td>
<td></td>
</tr>
</tbody>
</table>

- 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.

(Contd. on page 5)
9 Physical and chemical properties

- **Information on basic physical and chemical properties**
  - **General Information**
  - **Appearance:**
    - **Form:** Liquid
    - **Color:** Red
    - **Odor:** Characteristic
  - **Change in condition**
    - **Melting point/Melting range:** Not determined
    - **Boiling point/Boiling range:** 79 °C (174 °F)
  - **Flash point:** 37 °C (99 °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:** 6.5 Vol %
    - **Upper:** 22 Vol %
  - **Vapor pressure at 25 °C (77 °F):** 59.0 hPa (44 mm Hg)
  - **Density:** Not determined
  - **Solubility in / Miscibility with**
    - **Water:** Soluble
  - **Solvent content:**
    - **Organic solvents:** 20.0 %
    - **Other information** No further relevant information available.
10 Stability and reactivity

- Reactivity: No further relevant information available.
- 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:
  Carbon monoxide (CO) and carbon dioxide (CO2)
  Nitrogen oxides (NOx)
  Hydrogen chloride (HCl) gas

11 Toxicological information

- Information on toxicological effects
- Acute toxicity:
  - LD/LC50 values that are relevant for classification:
    | 64-17-5 ethanol |
    | Oral | LD50  |
    |       | 3450 mg/kg (MOU) |
    |       | 7060 mg/kg (rat) |
12 Ecological information

- Toxicity
- Aquatic toxicity: This material is not expected to be toxic to aquatic life.
- 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.
- 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.

14 Transport information

- UN-Number
- Void
- DOT, ADN, IMDG, IATA
- Void
- UN proper shipping name
- DOT, ADN, IMDG, IATA
- Void
- Transport hazard class(es)
- DOT, ADN, IMDG, IATA
- Void
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- **Packing group**
  - DOT, IMDG, IATA: Void
- **Environmental hazards:**
  - Marine pollutant: No
- **Special precautions for user**: Not applicable.
- **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**: Not applicable.
- **Transport/Additional information**: If "void" appears in the Hazard Class section for the type of transportation, this indicates the product is not regulated for transportation. 49 CFR §173.150 Exceptions For Class 3 (Flammable) and Combustible Liquids being used.
- **UN "Model Regulation"**: Void

## 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)**
    - 64-17-5 ethanol
    - 67-56-1 methanol
  - **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
· Carcinogenic categories

· TLV (Threshold Limit Value established by ACGIH)

<table>
<thead>
<tr>
<th>Substance</th>
<th>TLV</th>
</tr>
</thead>
<tbody>
<tr>
<td>64-17-5 ethanol</td>
<td>A4</td>
</tr>
</tbody>
</table>

· GHS label elements

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

· Hazard pictograms

GHS02

· Signal word Warning

· Hazard-determining components of labeling:
  - ethanol
  - methanol

· Hazard statements
  - H226 Flammable liquid and vapor.

· Precautionary statements
  - P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.
  - P241 Use explosion-proof electrical/ventilating/lighting/equipment.
  - P280 Wear protective gloves / eye protection / face protection.
  - P240 Ground/bond container and receiving equipment.
  - P233 Keep container tightly closed.
  - P242 Use only non-sparking tools.
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  - P303+P361+P353 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
  - P370+P378 In case of fire: Use for extinction: CO2, powder or water spray.
  - 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.
Product Name: Gram Safranin

- **Department issuing SDS:** Environmental, Health & Safety
- **Contact:** Technical Service Representative
- **Date of preparation / last revision:** 06/03/2016 / 2
- **Abbreviations and acronyms:**
  - 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
  - PBT: Persistent, Bioaccumulative and Toxic
  - vPvB: very Persistent and very Bioaccumulative
  - OSHA: Occupational Safety & Health
  - TLV: Threshold Limit Value
  - PEL: Permissible Exposure Limit
  - REL: Recommended Exposure Limit
  - Flam. Liq. 2: Flammable liquids – Category 2
  - Flam. Liq. 3: Flammable liquids – Category 3
  - Acute Tox. 3: Acute toxicity – Category 3
  - STOT SE 1: Specific target organ toxicity (single exposure) – Category 1