Section 1 - Chemical Product and Company Identification

**MSDS Name:** May Grunwald Stain (BSI)

**Synonyms:** None.

Section 2 - Composition, Information on Ingredients

<table>
<thead>
<tr>
<th>CAS#</th>
<th>Chemical Name</th>
<th>Percent</th>
<th>EINECS/ELINCS</th>
</tr>
</thead>
<tbody>
<tr>
<td>67-56-1</td>
<td>Methyl alcohol</td>
<td>&gt;99</td>
<td>200-659-6</td>
</tr>
<tr>
<td>62851-42-7</td>
<td>May Grunwald Stain</td>
<td>&lt;1</td>
<td>unlisted</td>
</tr>
</tbody>
</table>

Section 3 - Hazards Identification

**EMERGENCY OVERVIEW**

Appearance: blue liquid. Flash Point: 52 deg F.

**Danger!** Poison! **Flammable liquid and vapor.** Harmful if inhaled. May be fatal or cause blindness if swallowed. Causes eye and skin irritation. May be absorbed through intact skin. May cause respiratory and digestive tract irritation. May cause central nervous system depression. May cause liver and kidney damage. May cause cardiac disturbances. Cannot be made non-poisonous. This substance has caused adverse reproductive and fetal effects in animals.

**Target Organs:** Kidneys, central nervous system, liver, cardiovascular system, eyes.

**Potential Health Effects**

**Eye:** Causes moderate eye irritation. Vapors may cause eye irritation. May cause painful sensitization to light.

**Skin:** May cause skin irritation. May be absorbed through the skin in harmful amounts.

**Ingestion:** May be fatal or cause blindness if swallowed. May cause irritation of the digestive tract. May cause respiratory failure. May cause liver and kidney damage. May cause vascular collapse and damage.

**Inhalation:** May cause respiratory tract irritation. May cause liver and kidney damage. May cause adverse central nervous system effects including headache, convulsions, and possible death. May cause visual impairment and possible permanent blindness. May cause effects similar to those described for ingestion.

**Chronic:** Prolonged or repeated skin contact may cause dermatitis. Chronic inhalation and ingestion may cause effects similar to those of acute inhalation and ingestion. May cause fetal effects.

Section 4 - First Aid Measures
**Eyes:** Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately. Do NOT allow victim to rub eyes or keep eyes closed.

**Skin:** Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops or persists.

**Ingestion:** Call a poison control center. If swallowed, do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical aid.

**Inhalation:** Get medical aid immediately. Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

**Notes to Physician:** Effects may be delayed. Ethanol may inhibit methanol metabolism.

**Antidote:** No specific antidote exists.

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### Section 5 - Fire Fighting Measures

**General Information:** Containers can build up pressure if exposed to heat and/or fire. As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH approved or equivalent, and full protective gear. Vapors can travel to a source of ignition and flash back. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Flammable Liquid. Can release vapors that form explosive mixtures at temperatures above the flashpoint.

**Extinguishing Media:** For small fires, use dry chemical, carbon dioxide, water spray or alcohol-resistant foam. Use water spray to cool fire-exposed containers. Water may be ineffective.

**Flash Point:** 52°F (11.11°C)

**Autoignition Temperature:** 862°F (461.11°C)

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### Section 6 - Accidental Release Measures

**General Information:** Use proper personal protective equipment as indicated in Section 8.

**Spills/Leaks:** Scoop up with a nonsparking tool, then place into a suitable container for disposal. Use water spray to disperse the gas/vapor. Remove all sources of ignition. Absorb spill using an absorbent, non-combustible material such as earth, sand, or vermiculite. Do not use combustible materials such as sawdust.

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### Section 7 - Handling and Storage

**Handling:** Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use with adequate ventilation. Avoid contact with skin and eyes. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Do not ingest or inhale. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames.

**Storage:** Keep away from sources of ignition. Store in a cool, dry, well-ventilated area away from incompatible substances.
Section 8 - Exposure Controls, Personal Protection

**Engineering Controls:** Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

**Exposure Limits**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH</th>
<th>NIOSH</th>
<th>OSHA - Final PELs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methyl alcohol</td>
<td>200 ppm TWA; 250 ppm STEL; skin - potential for cutaneous absorption</td>
<td>200 ppm TWA; 260 mg/m3 TWA 6000 ppm IDLH</td>
<td>200 ppm TWA; 260 mg/m3 TWA</td>
</tr>
<tr>
<td>May Grunwald Stain</td>
<td>none listed</td>
<td>none listed</td>
<td>none listed</td>
</tr>
</tbody>
</table>

**OSHA Vacated PELs:** Methyl alcohol: 200 ppm TWA; 260 mg/m3 TWA May Grunwald Stain: No OSHA Vacated PELs are listed for this chemical.

**Personal Protective Equipment**

**Eyes:** Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA’s eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

**Skin:** Wear appropriate protective gloves and clothing to prevent skin exposure.

Section 9 - Physical and Chemical Properties

**Physical State:** Liquid

**Appearance:** blue

**Odor:** Alcohol odor.

**pH:** Not available.

**Vapor Pressure:** Not available.

**Vapor Density:** Not available.

**Evaporation Rate:** Not available.

**Viscosity:** Not available.

**Boiling Point:** 64.6 deg C

**Freezing/Melting Point:** -98 deg C

**Decomposition Temperature:** Not available.

**Solubility:** Complete in water.

**Specific Gravity/Density:** 0.79 (Water=1)

**Molecular Formula:** Not applicable.

**Molecular Weight:** Not available.

Section 10 - Stability and Reactivity

**Chemical Stability:** Stable at room temperature in closed containers under normal storage and handling conditions.

**Conditions to Avoid:** High temperatures, incompatible materials, ignition sources.

**Incompatibilities with Other Materials:** Oxidants (such as barium perchlorate, bromine, chlorine, hydrogen peroxide, lead perchlorate, perchloric acid, sodium hypochlorite). Active metals (such as potassium and magnesium). Substance is also
incompatible with specific chemicals including: acetyl bromide, alkyl aluminum salts, beryllium dihydride, carbon tetrachloride + metals, chloroform + heat, chloroform + sodium hydroxide, cyanuric chloride, diethyl zinc, nitric acid, and potassium tertbutoxide. Please refer to the NFPA Fire Protection Guide for all specifics.

Section 11 - Toxicological Information

RTECS#:  
CAS# 67-56-1: PC1400000  
CAS# 62851-42-7 unlisted.

LD50/LC50:  
CAS# 67-56-1:  
Draize test, rabbit, eye: 40 mg Moderate;  
Draize test, rabbit, eye: 100 mg/24H Moderate;  
Draize test, rabbit, skin: 20 mg/24H Moderate;  
Inhalation, rabbit: LC50 = 81000 mg/m3/14H;  
Inhalation, rat: LC50 = 64000 ppm/4H;  
Oral, mouse: LD50 = 7300 mg/kg;  
Oral, rabbit: LD50 = 14200 mg/kg;  
Oral, rat: LD50 = 5600 mg/kg;  
Skin, rabbit: LD50 = 15800 mg/kg;  

CAS# 62851-42-7:  
Carcinogenicity:  
CAS# 67-56-1: Not listed by ACGIH, IARC, NTP, or CA Prop 65.  
CAS# 62851-42-7: Not listed by ACGIH, IARC, NTP, or CA Prop 65.  

Epidemiology: No information available.  
Teratogenicity: Effects on Newborn: behavioral, orl-rat TDLo=7500 mg/kg.  
Embryo or Fetus: fetotoxicity, TClO=10000 ppm/7H Specific Developmental Abnormalities: cardiovascular, musculoskeletal, urogenital, TClO=20000 ppm/7H.

Section 12 - Ecological Information

Ecotoxicity: Fish: Rainbow trout: LC50 = 12900-15300 mg/L; 96 Hr; Flow-through @ 24-24.3°C Fish: Rainbow trout: LC50 = 11200 mg/L; 24 Hr; Fingerling (Unspecified)Bacteria: Phytobacterium phosphoreum: EC50 = 34900 mg/L; 5-30 min; Microtox test Goldfish (fresh water), 250 ppm/11H, death. Aquatic toxicity rating: TLm 96 >1000 ppm.  
Environmental: No information reported.  
Physical: No information available.  
Other: None.

Section 13 - Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate
classification.

**RCRA P-Series:** None listed.

**RCRA U-Series:** CAS# 67-56-1: waste number U154 (Ignitable waste).

### Section 14 - Transport Information

<table>
<thead>
<tr>
<th></th>
<th>US DOT</th>
<th>Canada TDG</th>
</tr>
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<tbody>
<tr>
<td><strong>Shipping Name:</strong></td>
<td>FLAMMABLE LIQUID</td>
<td>No information available.</td>
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<tr>
<td><strong>Hazard Class:</strong></td>
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<td></td>
</tr>
<tr>
<td><strong>UN Number:</strong></td>
<td>1230</td>
<td></td>
</tr>
<tr>
<td><strong>Packing Group:</strong></td>
<td>II</td>
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</tbody>
</table>

### Section 15 - Regulatory Information

**US FEDERAL**

**TSCA**

CAS# 67-56-1 is listed on the TSCA inventory.

CAS# 62851-42-7 is not listed on the TSCA inventory. It is for research and development use only.

**Health & Safety Reporting List**

None of the chemicals are on the Health & Safety Reporting List.

### Section 16 - Additional Information

**MSDS Creation Date:** 3/24/2000

**Revision #3 Date:** 10/03/2005

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall INDO GULF GROUP be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if INDO GULF GROUP has been advised of the possibility of such damages.