1 Identification

- **Product identifier**
  - Trade name: Fluorocell WDF

- **Other means of identification**: No other identifiers

- **Recommended use and restriction on use**
  - **Recommended use**: Diagnostic testing
  - **Restrictions on use**: No relevant information available.

- **Details of the supplier of the Safety Data Sheet**
  - **Manufacturer/Supplier**: SYSMEX AMERICA, Inc
    577 Aptakisic Road
    Lincolnshire, IL 60069 USA
    Phone: 847-996-4500
    1-800-3SYSMEX (1-800-379-7639)
  - **Emergency telephone number**:
    ChemTel Inc.
    (800)255-3924 (North America)
    +1 (813)248-0585 (International)

2 Hazard(s) identification

- **Classification of the substance or mixture**
  - Flam. Liq. 4 H227 Combustible liquid.
  - Acute Tox. 4 H302 Harmful if swallowed.
  - Acute Tox. 4 H312 Harmful in contact with skin.
  - Acute Tox. 4 H332 Harmful if inhaled.
  - STOT SE 2 H371 May cause damage to the central nervous system and optic nerve.
  - STOT RE 2 H373 May cause damage to the kidneys through prolonged or repeated exposure. Route of exposure: Oral.

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

- **Hazard pictograms**:
  - GHS07 GHS08

- **Signal word**: Warning

- **Hazard statements**:
  - H227 Combustible liquid.
  - H302+H312+H332 Harmful if swallowed, in contact with skin or if inhaled.
  - H371 May cause damage to the central nervous system and optic nerve.

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H373 May cause damage to the kidneys through prolonged or repeated exposure. Route of exposure: Oral.

- Precautionary statements:
  P210 Keep away from flames and hot surfaces. – No smoking.
P260 Do not breathe mist/vapors/spray.
P264 Wash thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves/protective clothing/eye protection.
P301+P312 If swallowed: Call a poison center/doctor if you feel unwell.
P330 Rinse mouth.
P302+P352 If on skin: Wash with plenty of water.
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P311 IF exposed or concerned: Call a poison center/doctor.
P314 Get medical advice/attention if you feel unwell. P362+P364 Take off contaminated clothing and wash it before reuse. P370+P378 In case of fire: Use for extinction: CO2, powder or water spray. P403+P235 Store in a well-ventilated place. Keep cool.
P405 Store locked up.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

- Other hazards There are no other hazards not otherwise classified that have been identified.

3 Composition/information on ingredients

- Chemical characterization: Mixtures

- Components:

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>107-21-1</td>
<td>&gt;80%</td>
</tr>
<tr>
<td>Ethylene glycol</td>
<td></td>
</tr>
<tr>
<td>STOT RE 2, H373</td>
<td></td>
</tr>
<tr>
<td>Acute Tox. 4, H302</td>
<td></td>
</tr>
<tr>
<td>67-56-1</td>
<td>1-5%</td>
</tr>
<tr>
<td>Methanol</td>
<td></td>
</tr>
<tr>
<td>Flam. Liq. 2, H225</td>
<td></td>
</tr>
<tr>
<td>Acute Tox. 3, H301; Acute Tox. 3, H311; Acute Tox. 3, H331</td>
<td></td>
</tr>
<tr>
<td>STOT SE 1, H370</td>
<td></td>
</tr>
<tr>
<td>Eye Irrit. 2B, H320</td>
<td></td>
</tr>
</tbody>
</table>

- Additional information:
For the listed ingredient(s), the identity and/or exact percentage(s) are being withheld as a trade secret. For the wording of the listed Hazard Statements, refer to section 16.

4 First-aid measures

- Description of first aid measures
- After inhalation:

(Cont'd. on page 3)
Supply fresh air; consult doctor in case of complaints. Provide oxygen treatment if affected person has difficulty breathing.

- **After skin contact:**
  - Immediately remove any clothing soiled by the product.
  - Immediately rinse with water.
  - If skin irritation continues, consult a doctor.

- **After eye contact:**
  - Protect unharmed eye.
  - Remove contact lenses if worn, if possible.
  - Rinse opened eye for several minutes under running water. Then consult a doctor.

- **After swallowing:**
  - Rinse out mouth and then drink plenty of water.
  - Do not induce vomiting; immediately call for medical help.

- **Most important symptoms and effects, both acute and delayed:**
  - Headache
  - Breathing difficulty
  - Coughing
  - Dizziness
  - Thirst
  - Acidosis
  - Nausea
  - Gastric or intestinal disorders when ingested.
  - Vision disorders.
  - Disorientation
  - Unconsciousness

- **Danger:**
  - Harmful if swallowed, in contact with skin or if inhaled.
  - Danger of impaired breathing.
  - Danger of cerebral edema.
  - May cause damage to the kidneys through prolonged or repeated exposure. Route of exposure: Oral.

- **Indication of any immediate medical attention and special treatment needed:**
  - Contains ethylene glycol and methanol. Consult literature for specific antidotes.
  - Later observation for pneumonia and pulmonary edema.
  - If necessary oxygen respiration treatment.
  - Medical supervision for at least 48 hours.

### 5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**
  - Alcohol resistant foam
  - Water fog / haze
  - Water spray
  - Carbon dioxide
  - Gaseous extinguishing agents
  - Fire-extinguishing powder

(Cont'd. on page 4)
6 Accidental release measures

- Personal precautions, protective equipment and emergency procedures
  Ensure adequate ventilation.
  Use personal protective equipment as required.
  For large spills, use respiratory protective device against the effects of fumes/dust/aerosol.
  Particular danger of slipping on leaked/spilled product.
  Keep away from ignition sources.
- Environmental precautions
  Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
  Inform respective authorities in case of seepage into water course or sewage system.
- Methods and material for containment and cleaning up
  Absorb with non-combustible liquid-binding material (sand, diatomite, acid binders, universal binders).
  Send for recovery or disposal in suitable receptacles.
- 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:
    Avoid splashes or spray in enclosed areas.
    Use only in well ventilated areas.
    Avoid breathing mist, vapors, or spray.
    Avoid contact with the eyes and skin.
    Open and handle receptacle with care.
  - Information about protection against explosions and fires:
    Combustible liquid.
    Keep ignition sources away - Do not smoke.
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- Conditions for safe storage, including any incompatibilities
  - Requirements to be met by storerooms and receptacles:
    Store in a well-ventilated place. Keep cool.
    Avoid storage near extreme heat, ignition sources or open flame.
  - Information about storage in one common storage facility:
    Store away from foodstuffs.
    Store away from oxidizing agents.
  - Specific end use(s) No relevant information available.

8 Exposure controls/personal protection

- Control parameters

  Components with limit values that require monitoring at the workplace:

<table>
<thead>
<tr>
<th>Component</th>
<th>TLV (USA)</th>
<th>WEEL (USA)</th>
<th>EL (Canada)</th>
<th>EV (Canada)</th>
<th>LMPE (Mexico)</th>
</tr>
</thead>
</table>
| 107-21-1 Ethylene glycol | **Short-term value: 10** mg/m³, 50 ppm  
                       | Long-term value: 25 ppm  
                       | *vapor fraction:*  
                       | **Inh. fraction, aerosol only*  
                       | **Long-term value: 10 mg/m³*  
                       | **Short-term value: 20** mg/m³  
                       | Long-term value: 10 ppm  
                       | Ceiling limit value: 100* mg/m³, 50*** ppm  
                       | *Aerosol; **Particulate; ***Vapour  
                       | **Ceiling limit value: 100 mg/m³**  
                       | **Ceiling limit value: 100* mg/m³**  
                       | A4, *solo aerosol  
| 67-56-1 Methanol | **Long-term value: 260 mg/m³, 200 ppm**  
                       | **Long-term value: 325 mg/m³, 250 ppm**  
                       | **Long-term value: 260 mg/m³, 200 ppm**  
                       | **Long-term value: 262 mg/m³, 200 ppm**  
                       | **Long-term value: 250 ppm**  
                       | **Long-term value: 200 ppm**  
                       | **Long-term value: 250 ppm**  
                       | **Long-term value: 200 ppm**  

(Cont'd. on page 6)
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<table>
<thead>
<tr>
<th>PIEL, IBE</th>
<th>(Cont’d. of page 5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>· Ingredients with biological limit values:</td>
<td></td>
</tr>
<tr>
<td>67-56-1 Methanol</td>
<td></td>
</tr>
<tr>
<td>BEI (USA) 15 mg/L</td>
<td></td>
</tr>
<tr>
<td>· Exposure controls</td>
<td></td>
</tr>
<tr>
<td>· General protective and hygienic measures:</td>
<td></td>
</tr>
<tr>
<td>The usual precautionary measures for handling chemicals should be followed.</td>
<td></td>
</tr>
<tr>
<td>Keep away from foodstuffs, beverages and feed.</td>
<td></td>
</tr>
<tr>
<td>Wash hands before breaks and at the end of work.</td>
<td></td>
</tr>
<tr>
<td>Do not inhale gases / fumes / aerosols.</td>
<td></td>
</tr>
<tr>
<td>Avoid contact with the eyes and skin.</td>
<td></td>
</tr>
<tr>
<td>· Engineering controls: No relevant information available.</td>
<td></td>
</tr>
<tr>
<td>· Breathing equipment: Use suitable respiratory protective device when aerosol or mist is formed.</td>
<td></td>
</tr>
<tr>
<td>· Protection of hands:</td>
<td></td>
</tr>
<tr>
<td>Protective gloves</td>
<td></td>
</tr>
<tr>
<td>The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.</td>
<td></td>
</tr>
<tr>
<td>· Eye protection:</td>
<td></td>
</tr>
<tr>
<td>Safety glasses</td>
<td></td>
</tr>
<tr>
<td>· Body protection: Protective work clothing</td>
<td></td>
</tr>
<tr>
<td>· Limitation and supervision of exposure into the environment</td>
<td></td>
</tr>
<tr>
<td>Avoid release to the environment.</td>
<td></td>
</tr>
<tr>
<td>· Risk management measures No relevant information available.</td>
<td></td>
</tr>
</tbody>
</table>

9 Physical and chemical properties

· Information on basic physical and chemical properties
  · Appearance:
    Form: Liquid
    Color: Blue
  · Odor: Odorless
  · Odor threshold: Not determined.
  · pH-value: Not determined.
  · Melting point/Melting range: Not determined.

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- Boiling point/Boiling range: Not determined.
- Flash point: 63 °C (145.4 °F)
- Flammability (solid, gaseous): Not applicable.
- Auto-ignition temperature: Not determined.
- Decomposition temperature: Not determined.
- Danger of explosion: Not determined.
- Explosion limits
  Lower: Not determined.
  Upper: Not determined.
  Oxidizing properties: Non-oxidizing.
- Vapor pressure: Not determined.
- Density
  Relative density: 1.09
  Vapor density: Not determined.
  Evaporation rate: Not determined.
- Solubility in / Miscibility with
  Water: Fully miscible.
- Partition coefficient (n-octanol/water): Not determined.
- Viscosity
  Dynamic: Not determined.
  Kinematic: Not determined.
- Other information
  No relevant information available.

10 Stability and reactivity

- Reactivity: No relevant information available.
- Chemical stability:
- Thermal decomposition / conditions to be avoided:
  Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
- Possibility of hazardous reactions
  Toxic fumes may be released if heated above the decomposition point.
  Reacts with strong acids.
  Combustible liquid.
  Reacts with strong oxidizing agents.
  Used empty containers may contain product gases which form explosive mixtures with air.
  Can form explosive mixtures in air if heated above flash point and/or when sprayed or atomized.
- Conditions to avoid Excessive heat.
- Incompatible materials

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Strong acids
Oxidizers
  Hazardous decomposition products
  Under fire conditions only:
  Carbon monoxide and carbon dioxide

11 Toxicological information

- Information on toxicological effects
  - Acute toxicity: Harmful if swallowed, in contact with skin or if inhaled.
  - LD/LC50 values that are relevant for classification: None.
  - Primary irritant effect:
    - On the skin: Based on available data, the classification criteria are not met.
    - On the eye: Based on available data, the classification criteria are not met.
  - Sensitization: Based on available data, the classification criteria are not met.

- IARC (International Agency for Research on Cancer):
  None of the ingredients are listed.

- NTP (National Toxicology Program):
  None of the ingredients are listed.

- OSHA-Ca (Occupational Safety & Health Administration):
  None of the ingredients are listed.

- Probable route(s) of exposure:
  Ingestion.
  Inhalation.
  Eye contact.
  Skin contact.
  Germ cell mutagenicity: Based on available data, the classification criteria are not met.
  Carcinogenicity: Based on available data, the classification criteria are not met.
  Reproductive toxicity: Based on available data, the classification criteria are not met.
  STOT-single exposure: May cause damage to the central nervous system and optic nerve.
  STOT-repeated exposure:
    May cause damage to the kidneys through prolonged or repeated exposure. Route of exposure: Oral.
  Aspiration hazard: Based on available data, the classification criteria are not met.

12 Ecological information

- Toxicity
  - Aquatic toxicity No relevant information available.
  - Persistence and degradability No relevant information available.
  - Bioaccumulative potential: No relevant information available.
  - Mobility in soil: No relevant information available.
  - Additional ecological information

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· General notes:
  Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Results of PBT and vPvB assessment
· PBT: Not applicable.
· vPvB: Not applicable.
· Other adverse effects No relevant information available.

13 Disposal considerations

· Waste treatment methods
· Recommendation:
  Contact waste processors for recycling information.
  The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes.

· Uncleaned packagings
· Recommendation: Disposal must be made according to official regulations.

14 Transport information

· UN-Number
  · DOT, ADR/RID/ADN, IMDG, IATA Not regulated.
· UN proper shipping name
  · DOT, ADR/RID/ADN, IMDG, IATA Not regulated.
· Transport hazard class(es)
  · DOT, ADR/RID/ADN, IMDG, IATA
  · Class Not regulated.
· Packing group
  · DOT, ADR/RID/ADN, IMDG, IATA Not regulated.
· 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:

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- DOT
  Classified as combustible under US DOT regulations.
  Labeling is only required for single packages ≥119 US gal / 450 L.

15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
  - United States (USA)
  - SARA
    - Section 302 (extremely hazardous substances):
      None of the ingredients are listed.
    - Section 355 (extremely hazardous substances):
      None of the ingredients are listed.
    - Section 313 (Specific toxic chemical listings):
      All ingredients are listed.
  - TSCA (Toxic Substances Control Act)
    All ingredients are listed.
- Proposition 65 (California)
  - Chemicals known to cause cancer:
    None of the ingredients are listed.
  - Chemicals known to cause developmental toxicity for females:
    None of the ingredients are listed.
  - Chemicals known to cause developmental toxicity for males:
    None of the ingredients are listed.
  - Chemicals known to cause developmental toxicity:
    107-21-1 | Ethylene glycol
    67-56-1 | Methanol
- EPA (Environmental Protection Agency):
  None of the ingredients are listed.
- IARC (International Agency for Research on Cancer):
  None of the ingredients are listed.
- Canadian Domestic Substances List (DSL) (Substances not listed.):
  All ingredients are listed.

16 Other information

(Cont'd. on page 11)
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- **Abbreviations and acronyms:**
  - ADR: 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
  - CAS: Chemical Abstracts Service (division of the American Chemical Society)
  - LC50: Lethal concentration, 50 percent
  - LD50: Lethal dose, 50 percent
  - PBT: Persistant, Bio-accumulable, Toxic
  - vPvB: very Persistent and very Bioaccumulative
  - OSHA: Occupational Safety & Health Administration
  - Flam. Liq. 2: Flammable liquids – Category 2
  - Flam. Liq. 4: Flammable liquids – Category 4
  - Acute Tox. 3: Acute toxicity – Category 3
  - Acute Tox. 4: Acute toxicity – Category 4
  - Eye Irrit. 2B: Serious eye damage/eye irritation – Category 2B
  - STOT SE 1: Specific target organ toxicity (single exposure) – Category 1
  - STOT SE 2: Specific target organ toxicity (single exposure) – Category 2
  - STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2

- **Sources**
  - Website, European Chemicals Agency (echa.europa.eu)
  - Website, US EPA Substance Registry Services (ofmpub.epa.gov/sor internet/registry/substreg/home/overview/home.do)
  - Website, Chemical Abstracts Registry, American Chemical Society (www.cas.org)
  - Safety Data Sheets, Individual Manufacturers
  - SDS Prepared by: ChemTel Inc.
  - 1305 North Florida Avenue
  - Tampa, Florida USA 33602-2902
  - Toll Free North America 1-888-255-3924 Intl. +01 813-248-0573
  - Website: www.chemtelinc.com

Sysmex America, Inc. www.sysmex.com
577 Aptakisic Road, Lincolnshire, IL 60069
Phone 847-996-4500 · 1-800-3SYSMEX (1-800-379-7639)
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