1 Identification

- Product identifier
  - Trade name: Fluorocell PLT
  - CAS Number: 107-21-1

- Recommended use and restriction on use
  - Recommended use: Diagnostic testing
  - Restrictions on use: See Sections 8 and 10 for further information.

- 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, +1 (813)248-0585

2 Hazard(s) identification

- Classification of the substance or mixture
  Acute Tox. 4 H302 Harmful if swallowed.
  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 substance is classified and labeled according to the Globally Harmonized System (GHS).

- Hazard pictograms:
  GHS07 GHS08

- Signal word: Warning

- Hazard statements:
  H302 Harmful if swallowed.
  H373 May cause damage to the kidneys through prolonged or repeated exposure. Route of exposure: Oral.

- Precautionary statements:
  P260 Do not breathe mist/vapors/spray.
  P264 Wash thoroughly after handling.

(Cont'd. on page 2)
Trade name: Fluorocell PLT

P270 Do not eat, drink or smoke when using this product.
P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
P314 Get medical advice/attention if you feel unwell.
P330 Rinse mouth.
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: Substances
CAS No. Description
107-21-1 ethylene glycol

4 First-aid measures

Description of first aid measures
After inhalation: Supply fresh air; consult doctor in case of complaints.
After skin contact:
Clean with water and soap.
If skin irritation continues, consult a doctor.
After eye contact:
Remove contact lenses if worn.
Rinse opened eye for several minutes under running water. If symptoms persist, 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:
Acidosis
Nausea
Cramp
Thirst
Danger:
Danger of hyperglycemia.
Danger of convulsion.
Danger of disturbed cardiac rhythm.
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:
If swallowed, gastric irrigation with added, activated carbon.

(Cont'd. of page 3)
### 5 Fire-fighting measures

- **Extinguishing media**
  - **Suitable extinguishing agents:** CO2, extinguishing powder or water spray. Fight larger fires with water spray.
  - **For safety reasons unsuitable extinguishing agents:** None.
- **Special hazards arising from the substance or mixture**
  - Formation of toxic gases is possible during heating or in case of fire.
- **Advice for firefighters**
  - **Protective equipment:** Wear self-contained respiratory protective device. Wear fully protective suit.
  - **Additional information:** Cool endangered receptacles with water spray.

### 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
  - Ensure adequate ventilation.
  - Particular danger of slipping on leaked/spilled product.
  - Use personal protective equipment as required.
- **Environmental precautions**
  - Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- **Methods and material for containment and cleaning up**
  - Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
  - Clean the affected area carefully; suitable cleaners are:
    - Warm water and cleansing agent
- **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.
    - Prevent formation of aerosols.


Keep receptacles tightly sealed.

- **Information about protection against explosions and fires:** No special measures required.

- **Conditions for safe storage, including any incompatibilities**
  - **Storage**
    - **Requirements to be met by storerooms and receptacles:**
      Avoid storage near extreme heat, ignition sources or open flame.
    - **Information about storage in one common storage facility:**
      Store away from foodstuffs.
      Do not store together with oxidizing and acidic materials.
    - **Further information about storage conditions:**
      Store in cool, dry conditions in well sealed receptacles.
      This product is hygroscopic.
      Protect from humidity and water.
  - **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>107-21-1 ethylene glycol</th>
</tr>
</thead>
<tbody>
<tr>
<td>TLV (USA)</td>
</tr>
<tr>
<td>Short-term value: NIC-127* NIC-10** mg/m³, NIC-50* ppm</td>
</tr>
<tr>
<td>Long-term value: NIC-63.5* mg/m³, NIC-25* ppm</td>
</tr>
<tr>
<td>Ceiling limit value: (100) mg/m³ (H); *inh. fraction + vapor, **inh. fraction, H</td>
</tr>
<tr>
<td>EL (Canada)</td>
</tr>
<tr>
<td>Short-term value: 20** mg/m³</td>
</tr>
<tr>
<td>Long-term value: 10** mg/m³</td>
</tr>
<tr>
<td>Ceiling limit value: 100* mg/m³, 50*** ppm</td>
</tr>
<tr>
<td>*Aerosol; **Particulate; ***Vapour</td>
</tr>
<tr>
<td>EV (Canada)</td>
</tr>
<tr>
<td>Ceiling limit value: 100 mg/m³</td>
</tr>
<tr>
<td>LMPE (Mexico)</td>
</tr>
<tr>
<td>Ceiling limit value: 100* mg/m³</td>
</tr>
<tr>
<td>A4, *solo aerosol</td>
</tr>
</tbody>
</table>

- **Exposure controls**
  - **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.
      Avoid contact with the eyes.
      Avoid close or long term contact with the skin.
      Do not inhale gases / fumes / aerosols.
  - **Engineering controls:** No relevant information available.

(Cont'd. on page 5)
Trade name: Fluorocell PLT

- Breathing equipment:
  Not necessary if room is well-ventilated.
  Use suitable respiratory protective device when aerosol or mist is formed.

- Protection of hands:
  Gloves are advised for repeated or prolonged contact.
  Wear protective gloves to handle contents of damaged or leaking units.
  The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

- For the permanent contact gloves made of the following materials are suitable:
  Butyl rubber, BR
  Nitrile rubber, NBR
  Rubber gloves

- Eye protection: Follow relevant national guidelines concerning the use of protective eyewear.

- Body protection: Not required.

- Limitation and supervision of exposure into the environment
  No special requirements.

- Risk management measures
  See Section 7 for additional information.

9 Physical and chemical properties

- Information on basic physical and chemical properties
  - Appearance:
    - Form: Fluid
    - Color: blue
  - Odor:
    - Odor: Odorless
    - Odor threshold: Not determined.
  - pH-value: Not determined.
  - Melting point/Melting range: -12.4 °C (10 °F)
  - Boiling point/Boiling range: Not determined.
  - Flash point: 129 °C (264 °F)
  - Flammability (solid, gaseous): Not applicable.
  - Auto-ignition temperature: 410 °C (770 °F)
  - Decomposition temperature: Not determined.
  - Danger of explosion: Product does not present an explosion hazard.

- Explosion limits
  - Lower: 3.2 Vol %
  - Upper: 53 Vol %

- Vapor pressure: 0.08 hPa
Trade name: Fluorocell PLT

· Density:
  Relative density: 1.11
  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:
  No decomposition if used and stored according to specifications.

· Possibility of hazardous reactions
  Reacts with strong acids and oxidizing agents.
  Reacts with peroxides and other radical forming substances.

· Conditions to avoid
  Excessive heat.
  Moisture.

· Incompatible materials
  Oxidizing agents
  Strong acids

· Hazardous decomposition products Carbon monoxide and carbon dioxide

11 Toxicological information

· Information on toxicological effects
  · Acute toxicity:
    · LD/LC50 values that are relevant for classification: None.
  · Primary irritant effect:
    · On the skin: Slight irritant effect on skin and mucous membranes.
    · On the eye: Slight irritant effect on eyes.
Trade name: Fluorocell PLT

- **Sensitization:** No sensitizing effects known.

<table>
<thead>
<tr>
<th>IARC (International Agency for Research on Cancer):</th>
</tr>
</thead>
<tbody>
<tr>
<td>Substance is not listed.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>NTP (National Toxicology Program):</th>
</tr>
</thead>
<tbody>
<tr>
<td>Substance is not listed.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OSHA-Ca (Occupational Safety &amp; Health Administration):</th>
</tr>
</thead>
<tbody>
<tr>
<td>Substance is not listed.</td>
</tr>
</tbody>
</table>

- **Probable route(s) of exposure:**
  - Ingestion.
  - Inhalation.
  - Eye contact.
  - Skin contact.

- **Acute effects (acute toxicity, irritation and corrosivity):** Harmful if swallowed.

- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction):**
  - **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:** Based on available data, the classification criteria are not met.
  - **STOT-repeated exposure:**
    - May cause damage to the kidneys through prolonged or repeated exposure. Route of exposure: Oral.

<table>
<thead>
<tr>
<th>Aspiration hazard:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Based on available data, the classification criteria are not met.</td>
</tr>
</tbody>
</table>

### 12 Ecological information

- **Toxicity**
  - **Aquatic toxicity**
    - No relevant information available.

- **Persistence and degradability**
  - Biodegradable.

- **Bioaccumulative potential:**
  - Does not accumulate in organisms

- **Mobility in soil:**
  - No relevant information available.

- **Additional ecological information**

<table>
<thead>
<tr>
<th>General notes:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Due to available data on eliminability/decomposition and bioaccumulation potential, a prolonged damage of the environment is unlikely.</td>
</tr>
<tr>
<td>Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Results of PBT and vPvB assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>PBT: Not applicable.</td>
</tr>
<tr>
<td>vPvB: Not applicable.</td>
</tr>
</tbody>
</table>
13 Disposal considerations

- **Waste treatment methods**
  - **Recommendation:**
    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.
  - **Recommended cleansing agent:** Water, if necessary with cleansing agents.

14 Transport information

- **UN-Number**
  - DOT, ADR, IMDG, IATA: Not regulated.

- **UN proper shipping name**
  - DOT, ADR, IMDG, IATA: Not regulated.

- **Transport hazard class(es)**
  - DOT, ADR, IMDG, IATA: Not regulated.

- **Packing group**
  - DOT, ADR, IMDG, IATA: Not regulated.

- **Environmental hazards**
  - Marine pollutant: No

- **Special precautions for user**
  - Not applicable.
  - **Danger code (Kemler):** -

- **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**
  - Not applicable.
15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
  - United States (USA)
  - SARA
    - Section 302 (extremely hazardous substances):
      Substance is not listed.
    - Section 355 (extremely hazardous substances):
      Substance is not listed.
    - Section 313 (Specific toxic chemical listings):
      Substance is listed.
  - TSCA (Toxic Substances Control Act)
    Substance is listed.
  - Proposition 65 (California)
    - Chemicals known to cause cancer:
      Substance is not listed.
    - Chemicals known to cause reproductive toxicity for females:
      Substance is not listed.
    - Chemicals known to cause reproductive toxicity for males:
      Substance is not listed.
    - Chemicals known to cause developmental toxicity:
      107-21-1 ethylene glycol
  - Carcinogenic categories
    - EPA (Environmental Protection Agency):
      Substance is not listed.
    - IARC (International Agency for Research on Cancer):
      Substance is not listed.
    - NIOSH-Ca (National Institute for Occupational Safety and Health):
      Substance is not listed.
  - Canadian Domestic Substances List (DSL):
    Substance is listed.

- Chemical safety assessment: A Chemical Safety Assessment has not been carried out.
**Safety Data Sheet**

acc. to OSHA HCS (29 CFR 1910.1200) and WHMIS 2015 regulations

Printing date: 11/04/2016                   Revision: 11/04/2016

**Trade name:** Fluorocell PLT

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**16 Other information**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Date of preparation / last revision:** 11/04/2016 / -

- **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: Persistent, Bioaccumulative and Toxic
  - vPvB: very Persistent and very Bioaccumulative
  - NIOSH: National Institute for Occupational Safety
  - OSHA: Occupational Safety & Health
  - LDLo: Lowest Lethal Dose Observed
  - Acute Tox. 4: Acute toxicity – Category 4
  - 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