## 1 Identification

- **Product identifier**
  - Trade name: Fluorocell WPC
  - Other means of identification: No other identifiers
- **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**
  - **Flam. Liq. 3 H226** Flammable liquid and vapor.
  - **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 product is classified and labeled according to the Globally Harmonized System (GHS).
  - **Hazard pictograms:**
    GHS02 GHS07 GHS08

- **Signal word:** Warning
- **Hazard statements:**
  - H226 Flammable liquid and vapor.
  - H302 Harmful if swallowed.
  - H373 May cause damage to the kidneys through prolonged or repeated exposure. Route of exposure: Oral.

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

· Precautionary statements:
P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P241 Use explosion-proof electrical/ventilating/lighting/equipment.
P260 Do not breathe mist/vapors/spray.
P264 Wash thoroughly after handling.
P280 Wear protective gloves/protective clothing/eye protection.
P240 Ground/bond container and receiving equipment.
P233 Keep container tightly closed.
P242 Use only non-sparking tools.
P243 Take precautionary measures against static discharge.
P270 Do not eat, drink or smoke when using this product.
P303+P361+P353 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
P330 Rinse mouth.
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.

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

3 Composition/information on ingredients

· Chemical characterization: Mixtures

<table>
<thead>
<tr>
<th>Components</th>
<th>Description</th>
<th>Identity and/or exact percentage(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>107-21-1 ethylene glycol</td>
<td>STOT RE 2, H373 Acute Tox. 4, H302</td>
<td>&gt;80%</td>
</tr>
<tr>
<td>64-17-5 ethanol</td>
<td>Flam. Liq. 2, H225 Eye Irrit. 2A, H319</td>
<td>10-20%</td>
</tr>
</tbody>
</table>

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

4 First-aid measures

· Description of first aid measures
After inhalation:
Supply fresh air; consult doctor in case of complaints.
In case of unconsciousness place patient stably in side position for transportation.

(Cont'd. on page 3)
· **After skin contact:**
  Immediately wash with water and soap and rinse thoroughly.
  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.
  A person vomiting while lying on their back should be turned onto their side.
  Do not induce vomiting; immediately call for medical help.

· **Most important symptoms and effects, both acute and delayed:**
  Nausea
  Thirst
  Cramp
  Dizziness
  Disorientation
  Unconsciousness

· **Danger:**
  Danger of convulsion.
  Danger of disturbed cardiac rhythm.
  Danger of hyperglycemia.
  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.
  Medical supervision for at least 48 hours.

### 5 Fire-fighting measures

· **Extinguishing media**

· **Suitable extinguishing agents:**
  CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

· **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.
  Keep away from ignition sources.
  Protect from heat.
  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 non-combustible liquid-binding material (sand, diatomite, acid binders, universal binders).
  Send for recovery or disposal in suitable receptacles.
  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:
    Prevent formation of aerosols.
    Keep receptacles tightly sealed.
    Keep away from heat and direct sunlight.
    Use only in well ventilated areas.
  - Information about protection against explosions and fires:
    Keep ignition sources away - Do not smoke.
    Protect from heat.
    Protect against electrostatic charges.
    Flammable gas-air mixtures may be formed in empty containers/receptacles.

- Conditions for safe storage, including any incompatibilities
  - Storage
    - Requirements to be met by storerooms and receptacles:
      Store in a cool location.
      Avoid storage near extreme heat, ignition sources or open flame.
      Protect from humidity and water.
    - Information about storage in one common storage facility:
      Store away from foodstuffs.
      Do not store together with oxidizing and acidic materials.
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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>Component</th>
<th>TLV (USA)</th>
<th>REL (USA)</th>
<th>TLV (USA)</th>
<th>EL (Canada)</th>
<th>EV (Canada)</th>
<th>LMPE (Mexico)</th>
</tr>
</thead>
<tbody>
<tr>
<td>107-21-1 ethylene glycol</td>
<td>Short-term value: NIC-127* NIC-10** mg/m³, NIC-50* ppm</td>
<td>Long-term value: NIC-63.5* mg/m³, NIC-25* ppm</td>
<td>Ceiling limit value: (100) mg/m³ (H); *inh. fraction + vapor, P:**inh. fraction, H</td>
<td>Short-term value: 20** mg/m³</td>
<td>Long-term value: 10** mg/m³</td>
<td>Ceiling limit value: 100* mg/m³, 50*** ppm *Aerosol; **Particulate; ***Vapour</td>
</tr>
<tr>
<td>64-17-5 ethanol</td>
<td>Long-term value: 1900 mg/m³, 1000 ppm</td>
<td>Long-term value: 1900 mg/m³, 1000 ppm</td>
<td>Short-term value: 1880 mg/m³, 1000 ppm</td>
<td>Short-term value: 1000 ppm</td>
<td>Long-term value: 1900 mg/m³, 1000 ppm</td>
<td>Long-term value: 1000 ppm A3</td>
</tr>
</tbody>
</table>

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.
Do not inhale gases / fumes / aerosols.
Avoid contact with the eyes.
Avoid close or long term contact with the skin.

(Cont'd. on page 6)
**Trade name:** Fluorocell WPC

- **Engineering controls:** No relevant information available.
- **Breathing equipment:**
  - Use suitable respiratory protective device in case of insufficient ventilation.
  - Use suitable respiratory protective device when aerosol or mist is formed.
- **Protection of hands:**
  - **Gloves:**
    - Protective gloves
    - 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
- **Eye protection:**
  - **Safety glasses**
  - Follow relevant national guidelines concerning the use of protective eyewear.
- **Body protection:** Protective work clothing
- **Limitation and supervision of exposure into the environment**
  - No relevant information available.
- **Risk management measures** See Section 7 for additional information.

### 9 Physical and chemical properties

- **Information on basic physical and chemical properties**
  - **Appearance:**
    - **Form:** Liquid
    - **Color:** Colorless
    - **Odor:** Sweetish
    - **Odor threshold:** Not determined.
  - **pH-value:** Not determined.
  - **Melting point/Melting range:** Not determined.
  - **Boiling point/Boiling range:** Not determined.
  - **Flash point:** 33 °C (91 °F)
  - **Flammability (solid, gaseous):** Not applicable.
### 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.
Keep away from heat/sparks/open flames/hot surfaces. No smoking.

**Possibility of hazardous reactions**
Flammable.
Develops readily flammable gases / fumes.
Reacts with strong acids.
Can form explosive mixtures in air if heated above flash point and/or when sprayed or atomized.
Reacts with peroxides and other radical forming substances.

**Conditions to avoid** Excessive heat.

**Incompatible materials**
Oxidizers

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### Flammability

- **Auto-ignition temperature:** 410 °C (770 °F)
- **Decomposition temperature:** Not determined.
- **Danger of explosion:** Product is not explosive. However, formation of explosive air/vapor mixtures are possible.

### Explosibility

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

- **Vapor pressure:** 59 hPa (44 mm Hg)

### Density

- **Relative density:** 1.11
- **Vapor density:** Not determined.
- **Evaporation rate:** Not determined.

### Solubility

- **Solubility in / Miscibility with Water:** Fully miscible.

### Other information

- **Partition coefficient (n-octanol/water):** Not determined.
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.
  - Sensitization: No sensitizing effects known.

- IARC (International Agency for Research on Cancer):
  64-17-5 ethanol 1

- 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.

- 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.

- 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: Biodegradable.
  - Bioaccumulative potential: Does not accumulate in organisms
Safety Data Sheet
acc. to OSHA HCS (29 CFR 1910.1200) and WHMIS 2015 regulations

Trade name: Fluorocell WPC

- Mobility in soil: No relevant information available.
- Additional ecological information
  - 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:
    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 UN1170
- UN proper shipping name
  - DOT, IATA Ethanol mixture
  - ADR, IMDG ETHANOL mixture
- Transport hazard class(es)
  - DOT
    - Class 3 Flammable liquids

(Cont'd. on page 8)
(Cont'd. on page 10)
Trade name: Fluorocell WPC

| · Label | 3 |
| · ADR | ![Flammable] |
| · Class | 3 (F1) Flammable liquids |
| · Label | 3 |
| · IMDG, IATA | ![Flammable] |
| · Class | 3 Flammable liquids |
| · Label | 3 |
| · Packing group | III |
| · DOT, ADR, IMDG, IATA |  |
| · Environmental hazards |  |
| · Marine pollutant: | No |
| · Special precautions for user | Warning: Flammable liquids |
| · Danger code (Kemler): | 30 |
| · EMS Number: | F-E,S-D |
| · Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code | Not applicable. |
| · Transport/Additional information: |  |
| · DOT | ![Limited Quantity] |
| | Limited Quantity for packages less than 30 kg gross and inner packagings less than 5 L each. |
| · ADR | ![Limited Quantity] |
| | Limited Quantity for packages less than 30 kg gross and inner packagings less than 5 L each. |
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acc. to OSHA HCS (29 CFR 1910.1200) and WHMIS 2015 regulations

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Trade name: Fluorocell WPC

- IMDG
  Limited Quantity for packages less than 30 kg gross and inner packagings less than 5 L each.

- IATA
  Limited Quantity for packages less than 30 kg gross and inner packagings less than 10 L net.

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):
        107-21-1 ethylene glycol
  - TSCA (Toxic Substances Control Act)
    All ingredients are listed.

- Proposition 65 (California)
  - Chemicals known to cause cancer:
    Ethanol - listing refers specifically to alcoholic beverage consumption and is not applicable for product.
  64-17-5 ethanol

- Chemicals known to cause reproductive toxicity for females:
  None of the ingredients are listed.

- Chemicals known to cause reproductive toxicity for males:
  None of the ingredients are listed.

- Chemicals known to cause developmental toxicity:
  All ingredients are listed.
## Carcinogenic categories

### EPA (Environmental Protection Agency):
None of the ingredients are listed.

### IARC (International Agency for Research on Cancer):
- **64-17-5 ethanol**
  - 1

### NIOSH-Ca (National Institute for Occupational Safety and Health):
None of the ingredients are listed.

### Canadian Domestic Substances List (DSL):
All ingredients are listed.

### Chemical safety assessment:
A Chemical Safety Assessment has not been carried out.

## 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
- Flam. Liq. 2: Flammable liquids – Category 2
- Flam. Liq. 3: Flammable liquids – Category 3
- Acute Tox. 4: Acute toxicity – Category 4
- Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A
- STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2

### Sources
(Cont’d. on page 13)
Trade name: Fluorocell WPC

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

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