

Safety Data Sheet

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

Printing date: 11/04/2016

Revision: 11/04/2016

1 Identification

- **Product identifier**
- **Trade name:** Fluorocell RET
- **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.
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:**



GHS02 GHS07 GHS08

- **Signal word:** Warning
- **Hazard statements:**
H226 Flammable liquid and vapor.

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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.

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

· 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.

P271 Use only outdoors or in a well-ventilated area.

P303+P361+P353 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P363 Wash contaminated clothing before reuse.

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.

P308+P311 IF exposed or concerned: Call a POISON CENTER/doctor.

P405 Store locked up.

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

· Components:

107-21-1	ethylene glycol	>80%
	 STOT RE 2, H373  Acute Tox. 4, H302	
67-56-1	methanol	<10%
	 Flam. Liq. 2, H225  Acute Tox. 3, H301; Acute Tox. 3, H311; Acute Tox. 3, H331  STOT SE 1, H370	

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· 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:**

Supply fresh air; consult doctor in case of complaints.
Provide oxygen treatment if affected person has difficulty breathing.

· 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. Then 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
Dizziness
Thirst
Gastric or intestinal disorders when ingested.
Vomiting.
Disorientation

· Danger:

Harmful if swallowed, in contact with skin or if inhaled.
Danger of convulsion.
Danger of circulatory collapse.
May cause damage to the kidneys through prolonged or repeated exposure. Route of exposure: Oral.
May cause damage to the central nervous system and optic nerve.

· Indication of any immediate medical attention and special treatment needed:

Contains ethanediol / methanol. Consult literature for specific antidotes.
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.

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- **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**
Use respiratory protective device against the effects of fumes/dust/aerosol.
Wear protective equipment. Keep unprotected persons away.
Ensure adequate ventilation.
Keep away from ignition sources.
Protect from heat.
- **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.
- **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:**
Open and handle receptacle with care.
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
Avoid splashes or spray in enclosed areas.
Avoid contact with the eyes and skin.
- **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:**
Store in a cool location.
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.
- **Further information about storage conditions:** Store in cool, dry conditions in well sealed receptacles.
- **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:**

107-21-1 ethylene glycol

TLV (USA)	Short-term value: NIC-127* NIC-10** mg/m ³ , NIC-50* ppm Long-term value: NIC-63.5* mg/m ³ , NIC-25* ppm Ceiling limit value: (100) mg/m ³ (H); *inh. fraction + vapor, P:**inh. fraction, H
EL (Canada)	Short-term value: 20** mg/m ³ Long-term value: 10** mg/m ³ Ceiling limit value: 100* mg/m ³ , 50*** ppm *Aerosol; **Particulate; ***Vapour
EV (Canada)	Ceiling limit value: 100 mg/m ³
LMPE (Mexico)	Ceiling limit value: 100* mg/m ³ A4, *solo aerosol

67-56-1 methanol

PEL (USA)	Long-term value: 260 mg/m ³ , 200 ppm
REL (USA)	Short-term value: 325 mg/m ³ , 250 ppm Long-term value: 260 mg/m ³ , 200 ppm Skin
TLV (USA)	Short-term value: 328 mg/m ³ , 250 ppm Long-term value: 262 mg/m ³ , 200 ppm Skin; BEI

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EL (Canada)	Short-term value: 250 ppm Long-term value: 200 ppm Skin
EV (Canada)	Short-term value: 325 mg/m ³ , 250 ppm Long-term value: 260 mg/m ³ , 200 ppm Skin
LMPE (Mexico)	Short-term value: 250 ppm Long-term value: 200 ppm PIEL, IBE

· Ingredients with biological limit values:

67-56-1 methanol

BEI (USA)	15 mg/L Medium: urine Time: end of shift Parameter: Methanol (background, nonspecific)
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- **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 and skin.
Do not inhale gases / fumes / aerosols.
- **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.
For spills, respiratory protection may be advisable.
- **Protection of hands:**



Protective gloves

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
Neoprene gloves
Nitrile rubber, NBR

- **Eye protection:**



Safety glasses

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- **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: Dark blue

· **Odor:** Odorless
· **Odor threshold:** Not determined.

· **pH-value:** Not determined.
· **Melting point/Melting range:** Not determined.
· **Boiling point/Boiling range:** Not determined.

· **Flash point:** 47 °C (117 °F)

· **Flammability (solid, gaseous):** Not applicable.

· **Auto-ignition temperature:** Not determined.

· **Decomposition temperature:** Not determined.

· **Danger of explosion:** Product is not explosive. However, formation of explosive air/vapor mixtures are possible.

· **Explosion limits**

Lower: Not determined.
 Upper: Not determined.

· **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.

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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 oxidizing agents.
Flammable.
Can form explosive mixtures in air if heated above flash point and/or when sprayed or atomized.
Toxic fumes may be released if heated above the decomposition point.
- **Conditions to avoid** Excessive heat.
- **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.
- **Sensitization:** No sensitizing effects known.

· **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.

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Eye contact.

Skin contact.

· Acute effects (acute toxicity, irritation and corrosivity):

Harmful if swallowed, in contact with skin or if inhaled.

· 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:** 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** Biodegradable.**· Bioaccumulative potential:** Does not accumulate in organisms**· Mobility in soil:** No relevant information available.**· Additional ecological information****· General notes:**

Due to available data on eliminability/decomposition and bioaccumulation potential, a prolonged damage of the environment is unlikely.

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.

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- **Uncleaned packagings**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

14 Transport information

<ul style="list-style-type: none"> · UN-Number · DOT · ADR, IMDG, IATA 	<p>Not regulated. UN1993</p>
<ul style="list-style-type: none"> · UN proper shipping name · DOT · ADR, IMDG · IATA 	<p>Not regulated. FLAMMABLE LIQUID, N.O.S. (METHANOL) Flammable liquid, n.o.s. (Methanol)</p>
<ul style="list-style-type: none"> · Transport hazard class(es) · DOT · Class 	<p>Not regulated.</p>
<ul style="list-style-type: none"> · ADR <div style="text-align: center;">  </div> <ul style="list-style-type: none"> · Class · Label 	<p>3 (F1) Flammable liquids 3</p>
<ul style="list-style-type: none"> · IMDG, IATA <div style="text-align: center;">  </div> <ul style="list-style-type: none"> · Class · Label 	<p>3 Flammable liquids 3</p>
<ul style="list-style-type: none"> · Packing group · DOT · ADR, IMDG, IATA 	<p>Not regulated. III</p>
<ul style="list-style-type: none"> · Environmental hazards · Marine pollutant: 	<p>No</p>
<ul style="list-style-type: none"> · Special precautions for user 	<p>Warning: Flammable liquids</p>

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· Danger code (Kemler):	30
· EMS Number:	F-E, <u>S</u> -E

· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
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· **Transport/Additional information:**

· DOT · Remarks:	Transport labeling is not required for non-bulk single package shipments by motor vehicle, rail car or aircraft. Bulk packaging consists of a maximum capacity of greater than 450L (119 gallons) for a liquid and a maximum net mass greater than 400kg (882 pounds) for a solid.
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· **ADR**



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

· **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.

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· **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 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:**

107-21-1	ethylene glycol
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67-56-1	methanol
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· **Carcinogenic categories**

· **EPA (Environmental Protection Agency):**

None of the ingredients are listed.

· **IARC (International Agency for Research on Cancer):**

None of the ingredients are listed.

· **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

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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. 3: Acute toxicity – Category 3
Acute Tox. 4: Acute toxicity – Category 4
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/sorinternet/registry/substreg/home/overview/home.do)
Website, Chemical Abstracts Registry, American Chemical Society (www.cas.org)
Patty's Industrial Hygiene, 6th ed., Rose, Vernon, ed. ISBN: ISBN: 978-0-470-07488-6
Casarett and Doull's Toxicology: The Basic Science of Poisons, 8th Ed., Klaasen, Curtis D., ed., ISBN: 978-0-07-176923-5.
Safety Data Sheets, Individual Manufacturers

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