

**Trade name:** Fluorocell RET

**Current version :** 4.0.3, issued: 16.06.2015

**Replaced version:** 4.0.2, issued: 08.06.2015

**Region:** GB

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1 Product identifier

Trade name

**Fluorocell RET**

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

**Relevant identified uses of the substance or mixture**

For in-vitro diagnosis

**Uses advised against**

No data available.

### 1.3 Details of the supplier of the safety data sheet

**Address**

SYSMEX LTD  
Sysmex House  
Garamonde Drive  
Wymbush  
Milton Keynes  
Buckinghamshire  
United Kingdom

MK8 8DF

Telephone no. +44 (0)870 902 9210

Fax no. +44 (0)870 902 9211

**Advice on Safety Data Sheet**

safety@sysmex.de

### 1.4 Emergency telephone number

For medical advice (in German and English):

+49 (0)551 192 40 (Giftinformationszentrum Nord)

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

**Classification in accordance with Regulation (EC) No 1272/2008 (CLP)**

Acute Tox. 4; H302

Flam. Liq. 3; H226

STOT SE 2; H371

### 2.2 Label elements

**Labelling according to Regulation (EC) No 1272/2008 (CLP Regulation)**

**Hazard pictograms**



GHS02



GHS07



GHS08

**Signal word**

Warning

**Hazardous component(s) to be indicated on label:**

ethanediol

methanol

**Hazard statements**

H226

Flammable liquid and vapour.

H302

Harmful if swallowed.

H371

May cause damage to organs.

Trade name: Fluorocell RET

Current version : 4.0.3, issued: 16.06.2015

Replaced version: 4.0.2, issued: 08.06.2015

Region: GB

**Precautionary statements**

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P260 Do not breathe mist/vapours/spray.

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

P501 Dispose of contents/container in accordance with local and national regulations.

**2.3 Other hazards**

PBT assessment  
No data available.

vPvB assessment  
No data available.

**SECTION 3: Composition/information on ingredients****3.1 Substances**

Not applicable. The product is not a substance.

**3.2 Mixtures****Hazardous ingredients**

No	Substance name	Additional information	
	CAS / EC / Index / REACH no	Classification (EC) 1272/2008 (CLP)	Concentration %
1	ethanediol		
	107-21-1 203-473-3 603-027-00-1 -	Acute Tox. 4*; H302	< 100.00 % -b.w.
2	methanol		
	67-56-1 200-659-6 603-001-00-X -	Acute Tox. 3*; H301 Acute Tox. 3*; H311 Acute Tox. 3*; H331 Flam. Liq. 2; H225 STOT SE 1; H370**	> 5.00 - < 10.00 % -b.w.

Full Text for all H-phrases and EUH-phrases: pls. see section 16

(\*, \*\*, \*\*\*, \*\*\*\*) Detailed explanation pls. refer to CLP regulation No. 1272/2008, annex VI, 1.2

No	Note	Specific concentration limits	M-factor (acute)	M-factor (chronic)
2	-	STOT SE 2; H371: C ≥ 3% STOT SE 1; H370: C ≥ 10%	-	-

**SECTION 4: First aid measures****4.1 Description of first aid measures****General information**

In case of persisting adverse effects, consult a physician. Remove contaminated clothing and shoes immediately, and launder thoroughly before reusing.

**After inhalation**

Remove affected person from the immediate area. Ensure supply of fresh air.

**After skin contact**

Wash off immediately with soap and water.

**After eye contact**

Separate eyelids, wash the eyes thoroughly with water (15 min.).

**After ingestion**

Call a doctor immediately. Do not induce vomiting. Never give anything by mouth to an unconscious person.

**Trade name:** Fluorocell RET

**Current version :** 4.0.3, issued: 16.06.2015

**Replaced version:** 4.0.2, issued: 08.06.2015

**Region:** GB

## 4.2 Most important symptoms and effects, both acute and delayed

No data available.

## 4.3 Indication of any immediate medical attention and special treatment needed

No data available.

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

#### Suitable extinguishing media

Foam; Extinguishing powder; Carbon dioxide; Water spray jet

#### Unsuitable extinguishing media

High power water jet

### 5.2 Special hazards arising from the substance or mixture

In the event of fire, the following can be released: Carbon dioxide (CO<sub>2</sub>); Carbon monoxide (CO); halogenated compounds; Nitrogen oxides (NO<sub>x</sub>); Boron oxides

### 5.3 Advice for firefighters

Use self-contained breathing apparatus. Wear protective clothing.

## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

#### For non-emergency personnel

Refer to protective measures listed in sections 7 and 8. Ensure adequate ventilation. Avoid contact with skin, eyes and clothing. Do not inhale vapours. Keep away sources of ignition.

#### For emergency responders

No data available. Personal protective equipment (PPE) - see Section 8.

### 6.2 Environmental precautions

Do not discharge into the drains/surface waters/groundwater. Do not discharge into the subsoil/soil.

### 6.3 Methods and material for containment and cleaning up

Take up with absorbent material (e.g., sand, kieselguhr, universal binder). When picked up, treat material as prescribed under heading "Disposal considerations".

### 6.4 Reference to other sections

No data available.

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

#### Advice on safe handling

Product inherent handling risks must be minimised taking the appropriate measures for protection and preventive actions. The working process should be designed to rule out the release of hazardous substances or skin contact as far as possible by the state of the art.

#### General protective and hygiene measures

Do not eat, drink or smoke during work time. Keep away from food, drink and animal feeding stuffs. Wash hands and skin before breaks and after work. Do not inhale vapours. Avoid contact with eyes and skin. Remove soiled or soaked clothing immediately. Have emergency shower available.

#### Advice on protection against fire and explosion

Keep away from sources of heat and ignition. Vapours can form an explosive mixture with air.

### 7.2 Conditions for safe storage, including any incompatibilities

#### Technical measures and storage conditions

Keep container tightly closed in a cool, well-ventilated place.

#### Recommended storage temperature

Value 2 - 35 °C

Trade name: Fluorocell RET

Current version : 4.0.3, issued: 16.06.2015

Replaced version: 4.0.2, issued: 08.06.2015

Region: GB

**Requirements for storage rooms and vessels**

Containers which are opened must be carefully closed and kept upright to prevent leakage.

**Advice on storage assembly**

Do not store together with: Aluminium; Chromyl chloride; alkaline hydroxides; Perchloric acid; Oxidizing agents

**7.3 Specific end use(s)**

No data available.

**SECTION 8: Exposure controls/personal protection****8.1 Control parameters****Occupational exposure limit values**

No	Substance name	CAS no.	EC no.
1	ethanediol	107-21-1	203-473-3
	2000/39/EWG		
	Ethylene glycol		
	STEL	104	mg/m <sup>3</sup> 40 ml/m <sup>3</sup>
	TWA	52	mg/m <sup>3</sup> 20 ml/m <sup>3</sup>
	Skin resorption / sensibilisation	Skin	
	List of approved workplace exposure limits (WELs) / EH40		
	Ethane 1,2-diol		
	particulate		
	TWA	10	mg/m <sup>3</sup>
	Skin resorption / sensibilisation	Sk	
	List of approved workplace exposure limits (WELs) / EH40		
	Ethane 1,2-diol		
	vapour		
	STEL	104	mg/m <sup>3</sup>
	TWA	52	mg/m <sup>3</sup>
	Skin resorption / sensibilisation	Sk	
2	methanol	67-56-1	200-659-6
	List of approved workplace exposure limits (WELs) / EH40		
	Methanol		
	STEL	333	mg/m <sup>3</sup> 250 ml/m <sup>3</sup>
	TWA	266	mg/m <sup>3</sup> 200 ml/m <sup>3</sup>
	Skin resorption / sensibilisation	Sk	
	2006/15/EC		
	Methanol		
	TWA	260	mg/m <sup>3</sup> 200 ml/m <sup>3</sup>
	Skin resorption / sensibilisation	Skin	

**8.2 Exposure controls****Appropriate engineering controls**

No data available.

**Personal protective equipment****Respiratory protection**

If workplace exposure limits are exceeded, a respiration protection approved for this particular job must be worn. In case of aerosol and mist formation, take appropriate measures for breathing protection in the event workplace threshold values are not specified.

**Eye / face protection**

Safety glasses with side protection shield (EN 166)

**Hand protection**

Sufficient protection is given wearing suitable protective gloves checked according to i.e. EN 374, in the event of risk of skin contact with the product. Before use, the protective gloves should be tested in any case for its specific work-station suitability (i.e. mechanical resistance, product compatibility and antistatic properties). Adhere to the manufacturer's instructions and information relating to the use, storage, care and replacement of protective gloves. Protective gloves shall be replaced immediately when physically damaged or worn. Design operations thus to avoid permanent use of protective gloves.

Trade name: Fluorocell RET

Current version : 4.0.3, issued: 16.06.2015

Replaced version: 4.0.2, issued: 08.06.2015

Region: GB

**Other**

Normal chemical work clothing.

**Environmental exposure controls**

No data available.

**SECTION 9: Physical and chemical properties****9.1 Information on basic physical and chemical properties**

<b>Form/Colour</b>			
liquid			
blue			
<b>Odour</b>			
odourless			
<b>Odour threshold</b>			
No data available			
<b>pH value</b>			
No data available			
<b>Boiling point / boiling range</b>			
No data available			
<b>Melting point / melting range</b>			
No data available			
<b>Decomposition point / decomposition range</b>			
No data available			
<b>Flash point</b>			
Value	47	°C	
<b>Auto-ignition temperature</b>			
No data available			
<b>Oxidising properties</b>			
No data available			
<b>Explosive properties</b>			
No data available			
<b>Flammability (solid, gas)</b>			
No data available			
<b>Lower flammability or explosive limits</b>			
No data available			
<b>Upper flammability or explosive limits</b>			
No data available			
<b>Vapour pressure</b>			
No data available			
<b>Vapour density</b>			
No data available			
<b>Evaporation rate</b>			
No data available			
<b>Relative density</b>			
No data available			
<b>Density</b>			
Value	1.09	- 1.10	g/ml
Reference temperature		20	°C

Trade name: Fluorocell RET

Current version : 4.0.3, issued: 16.06.2015

Replaced version: 4.0.2, issued: 08.06.2015

Region: GB

Solubility in water		
Value	100	%
Reference temperature	20	°C

Solubility(ies)
No data available

Partition coefficient: n-octanol/water
No data available

Viscosity
No data available

## 9.2 Other information

Other information
No data available.

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

Dangerous reactions are not expected if the product is handled according to its intended use.

### 10.2 Chemical stability

Stable under recommended storage and handling conditions (See section 7).

### 10.3 Possibility of hazardous reactions

None, if handled according to order.

### 10.4 Conditions to avoid

None, if handled according to intended use.

### 10.5 Incompatible materials

Aluminium; Chromyl chloride; alkaline hydroxides; Perchloric acid; Oxidizing agents

### 10.6 Hazardous decomposition products

Formaldehyde

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

Acute oral toxicity (result of the ATE calculation for the mixture)	
No	Product Name
1	Fluorocell RET
ATE (Mixture)	379.57
Method	Calculation method according Regulation (EC) No 1272/2008, (CLP), annex I, part 3, section 3.1.3.6.

Acute oral toxicity
No data available

Acute dermal toxicity (result of the ATE calculation for the mixture)	
No	Product Name
1	Fluorocell RET
Remarks	The result of the applied calculation method according to the European Regulation (EC) 1272/2008 (CLP), Paragraph 3.1.3.6, Part 3 of Annex I is outside the values that imply a classification / labelling of this mixture according to table 3.1.1 defining the respective categories (ATE dermal > 2000 mg/kg).

Trade name: Fluorocell RET

Current version : 4.0.3, issued: 16.06.2015

Replaced version: 4.0.2, issued: 08.06.2015

Region: GB

**Acute dermal toxicity**

No data available

**Acute inhalational toxicity (result of the ATE calculation for the mixture)****No Product Name****1 Fluorocell RET**

Remarks

The result of the applied calculation method according to the European Regulation (EC) 1272/2008 (CLP), Paragraph 3.1.3.6, Part 3 of Annex I is outside the values that imply a classification / labelling of this mixture according to table 3.1.1 defining the respective categories (ATE for inhalation: > 20.000 ppmV (gases), > 20 mg/l (vapours), > 5 mg/l (dusts/mists).

**Acute inhalational toxicity**

No data available

**Skin corrosion/irritation**

No data available

**Serious eye damage/irritation**

No data available

**Respiratory or skin sensitisation**

No data available

**Germ cell mutagenicity**

No data available

**Reproduction toxicity**

No data available

**Carcinogenicity**

No data available

**STOT-single exposure**

No data available

**STOT-repeated exposure**

No data available

**Aspiration hazard**

No data available

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

Inhalation of the vapours causes irritation of the respiratory tract and mucous membrane, headaches, nausea, giddiness, vomiting. Eye contact with the product may lead to irritation. Frequent persistent contact with the skin can cause skin irritation.

Trade name: Fluorocell RET

Current version : 4.0.3, issued: 16.06.2015

Replaced version: 4.0.2, issued: 08.06.2015

Region: GB

**SECTION 12: Ecological information****12.1 Toxicity****Toxicity to fish (acute)**

No data available

**Toxicity to fish (chronic)**

No data available

**Toxicity to Daphnia (acute)**

No data available

**Toxicity to Daphnia (chronic)**

No data available

**Toxicity to algae (acute)**

No data available

**Toxicity to algae (chronic)**

No data available

**Bacteria toxicity**

No data available

**12.2 Persistence and degradability**

No data available.

**12.3 Bioaccumulative potential**

No data available.

**12.4 Mobility in soil**

No data available.

**12.5 Results of PBT and vPvB assessment****Results of PBT and vPvB assessment**

PBT assessment

No data available.

vPvB assessment

No data available.

**12.6 Other adverse effects**

No data available.

**12.7 Other information****Other information**

Do not discharge product unmonitored into the environment.

**SECTION 13: Disposal considerations****13.1 Waste treatment methods****Product**

Allocation of a waste code number, according to the European Waste Catalogue, should be carried out in agreement with the regional waste disposal company.

**Packaging**

Residuals must be removed from packaging and when emptied completely disposed of in accordance with the regulations for waste removal. Incompletely emptied packaging must be disposed of in the form of disposal specified by the regional disposer.



Trade name: Fluorocell RET

Current version : 4.0.3, issued: 16.06.2015

Replaced version: 4.0.2, issued: 08.06.2015

Region: GB

**SECTION 14: Transport information****14.1 Transport ADR/RID/ADN**

Class	3
Classification code	F1
Packing group	III
Hazard identification no.	30
UN number	UN1993
Technical name	FLAMMABLE LIQUID, N.O.S.
Danger releasing substance	methanol
Special Provision 640	640E
Tunnel restriction code	D/E
Label	3

**14.2 Transport IMDG**

Class	3
Packing group	III
UN number	UN1993
Proper shipping name	FLAMMABLE LIQUID, N.O.S.
Danger releasing substance	methanol
EmS	F-E+S-E
Label	3

**14.3 Transport ICAO-TI / IATA**

Class	3
Packing group	III
UN number	UN1993
Proper shipping name	Flammable liquid, n.o.s.
Danger releasing substance	methanol
Label	3

**14.4 Other information**

No data available.

**14.5 Environmental hazards**

Information on environmental hazards, if relevant, please see 14.1 - 14.3.

**14.6 Special precautions for user**

No data available.

**14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

Not relevant

**SECTION 15: Regulatory information****15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture****EU regulations****Regulation (EC) No 1907/2006 (REACH) Annex XIV (List of substances subject to authorisation)**

According to the data available and/or specifications supplied by upstream suppliers, this product does not contain any substances considered as substances requiring authorisation as listed on Annex XIV of the REACH regulation (EC) 1907/2006.

**REACH candidate list of substances of very high concern (SVHC) for authorisation**

According to available data and the information provided by preliminary suppliers, the product does not contain substances that are considered substances meeting the criteria for inclusion in annex XIV (List of Substances Subject to Authorisation) as laid down in Article 57 and article 59 of REACH (EC) 1907/2006.

**Regulation (EC) No 1907/2006 (REACH) Annex XVII: RESTRICTIONS ON THE MANUFACTURE, PLACING ON THE MARKET AND USE OF CERTAIN DANGEROUS SUBSTANCES, PREPARATIONS AND ARTICLES**

The product is considered being subject to REACH regulation (EC) 1907/2006 annexe XVII.	No 3, 40
---	----------

**Trade name:** Fluorocell RET

**Current version :** 4.0.3, issued: 16.06.2015

**Replaced version:** 4.0.2, issued: 08.06.2015

**Region:** GB

**Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances**

This product is subject to Part I of Annex I, risk category:

P5c

## 15.2 Chemical safety assessment

No data available.

## SECTION 16: Other information

### Sources of key data used to compile the data sheet:

Regulation (EC) No 1907/2006 (REACH), 1272/2008 (CLP) as amended in each case.

EC Directives 2000/39/EC, 2006/15/EC, 2009/161/EU

National Threshold Limit Values of the corresponding countries as amended in each case.

Transport regulations according to ADR, RID, IMDG, IATA as amended in each case.

The data sources used to determine physical, toxic and ecotoxic data, are indicated directly in the corresponding chapter.

### Full text of the H- and EUH- phrases drawn up in sections 2 and 3 (provided not already drawn up in these sections)

H225	Highly flammable liquid and vapour.
H301	Toxic if swallowed.
H311	Toxic in contact with skin.
H331	Toxic if inhaled.
H370	Causes damage to organs.

### Department issuing safety data sheet

UMCO Umwelt Consult GmbH

Georg-Wilhelm-Str. 183 , D-21107 Hamburg

Tel.: +49 40 / 79 02 36 300 Fax: +49 40 / 79 02 36 357 e-mail: [umco@umco.de](mailto:umco@umco.de)

This information is based on our present state of knowledge and experience.

The security data sheet describes products with a view to the security requirements.

However, it should not constitute a guarantee for any specific product properties and shall not establish a legally valid relationship.

Document protected by copyright. Alterations or reproductions require the express written permission of UMCO Umwelt Consult GmbH.