

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.

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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 \geq 3% STOT SE 1; H370: C \geq 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.

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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 (CO₂); Carbon monoxide (CO); halogenated compounds; Nitrogen oxides (NO_x); 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

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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 ³	40 ml/m ³
	TWA	52	mg/m ³	20 ml/m ³
	Skin resorption / sensibilisation		Skin	
	List of approved workplace exposure limits (WELs) / EH40			
	Ethane 1,2-diol			
	particulate			
	TWA	10	mg/m ³	
	Skin resorption / sensibilisation		Sk	
	List of approved workplace exposure limits (WELs) / EH40			
	Ethane 1,2-diol			
	vapour			
	STEL	104	mg/m ³	
	TWA	52	mg/m ³	
	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 ³	250 ml/m ³
	TWA	266	mg/m ³	200 ml/m ³
	Skin resorption / sensibilisation		Sk	
	2006/15/EC			
	Methanol			
	TWA	260	mg/m ³	200 ml/m ³
	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.

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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

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

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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).

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Acute dermal toxicity	
No data available	

Acute inhalational toxicity (result of the ATE calculation for the mixture)	
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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, giddiners, vomiting. Eye contact with the product may lead to irritation. Frequent persistent contact with the skin can cause skin irritation.	

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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.

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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
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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

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

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