Fluorocell™ WPC
Safety Data Sheet

According to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and GHS

1. Identification

1.1 Product Identifier

Trade Name: **Fluorocell WPC**

Article Number: 0739

1.2 Application of the Substance/Preparation: Fluorocell WPC is a staining reagent for use with designated Sysmex Automated Hematology Analyzers. This reagent is to be handled by laboratory professionals or appropriately trained personnel.

1.3 Manufacturer or Distributor:

Sysmex America, Inc., 577 Aptakisic Road, Lincolnshire, IL 60069, 1-800-379-7639

1.4 Emergency Telephone Number:

Contact CHEM-TEL at 1-800-255-3924 or 1-813-248-0585

Sysmex's CHEM-TEL # MIS0004042

2. Hazards Identification

2.1 Classification of the Substance or Mixture

Classification according to Regulation (EC) No 1272/2008:



GHS02 flame

Flam. Liq. 3 H226 Flammable liquid and vapor



GHS07

Acute Tox. 4 H302 Harmful if swallowed

Classification according to Directive 67/548/EEC or Directive 1999/45/EC:



Xn; Harmful

R20/22-62-63: Harmful by inhalation and if swallowed. Possible risk of impaired fertility. Possible risk of harm to the unborn child.

Information concerning particular hazards for human and environment:

The product has to be labeled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

Classification System:

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

The classification is in accordance with the latest editions of international substances lists, and is supplemented by information from technical literature and by information provided by the company.

2.2 Label Elements

Labeling according to Regulation (EC) No 1272/2008:

The product is classified and labeled according to the CLP Regulation

Hazard pictograms:


GHS02


GHS07

Signal Word: Warning

Hazard-determining Components of Labeling:

Ethanediol

Hazard Statements:

H226 Flammable liquid and vapor

H302 Harmful if swallowed

Precautionary Statements:

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking

P280 Wear protective gloves and eye protection

P233 Keep container tightly closed

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician

P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower

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

Hazard Description:

WHMIS Symbols:

B2 – Flammable liquid

D1B – Toxic material causing immediate and serious toxic effects

D2B – Toxic material causing other toxic effects



HMIS Long Term Health Hazard Substances:

64-17-5 Ethanol

2.3 Other Hazards

Results of PBT and vPvB assessment:

PBT: Not applicable

vPvB: Not applicable

3. Composition/Information on Ingredients

3.1 Description: Mixture of substances listed below with nonhazardous additions

Dangerous Components:

CAS: 107-21-1 Ethanediol (Ethylene Glycol); 84.93% (W/W)

EINECS: 203-473-3  Xn R22

Index Number: 603-027-00-1  Acute Tox. 4, H302

CAS: 64-17-5 Ethanol; 15.07% (W/W)

EINECS: 200-578-6  F R11;  Flam. Liq. 2, H225

Index Number: 603-002-00-5

Additional Information: The dye component, which is the active ingredient, is not listed here as a hazardous ingredient as it does not comprise 1% of the mixture, does not present a physical hazard, is not capable of release to exceed permissible exposure limit/threshold limit values and has not been identified as a carcinogen. For the wording of the listed risk phrases, refer to Section 16

4. First Aid Measures

4.1 Description of First Aid Measures

General Information:

Symptoms of poisoning may even occur after several hours; therefore, medical observation for at least 48 hours after the accident

Take affected persons out into the fresh air

Inhalation:

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

Skin Contact:

Immediately wash with water and soap and rinse thoroughly

If skin irritation continues, consult a doctor

Eye Contact:

Protect unharmed eye

Rinse opened eye for several minutes under running water

Remove contact lenses if worn

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor

Ingestion:
Rinse out mouth and then drink plenty of water
Do not induce vomiting; call for medical help immediately
A person vomiting while laying on their back should be turned onto their side

4.2 Most Important Symptoms and Effects, Both Acute and Delayed
Nausea
Thirst
Cramp
Dizziness
Disorientation
Unconsciousness
Hazards:
Danger of convulsion
Danger of disturbed cardiac rhythm
Danger of hyperglycemia
Condition may deteriorate with alcohol consumption

4.3 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
Monitor circulation, possible shock treatment

5. Fire-fighting Measures

5.1 Extinguishing Media
Suitable extinguishing agents:
CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam
For safety reasons, unsuitable extinguishing agents: None

5.2 Special Hazards Arising from the Substance or Mixture:
In case of fire, the following can be released: Carbon monoxide (CO)
Under certain fire conditions, traces of other toxic gases cannot be excluded.

5.3 Advice for Firefighters
Protective equipment:
Wear self-contained respiratory protective device
Wear fully protective suit

6. Accidental Release Measures

6.1 Personal Precautions, Protective Equipment and Emergency Procedures:
Use respiratory protective device against the effects of fumes/dust/aerosol

Product forms slippery surface when combined with water
Wear protective equipment. Keep unprotected persons away
Keep away from ignition sources
Ensure adequate ventilation
Protect from heat

6.2 Environmental Precautions:

Dilute with plenty of water.

6.3 Methods and Material for Containment and Cleaning Up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust)
Send for recovery or disposal in suitable receptacles
Dispose contaminated material as waste according to Section 13
Clean the affected area carefully; suitable cleaners are: warm water and cleansing agent

6.4 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

7.1 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 Fire and Explosion Protection:

Keep ignition sources away. Do not smoke
Protect from heat
Protect against electrostatic charges
Flammable gas-air mixtures may form in empty receptacles

7.2 Conditions for Safe Storage, Including any Incompatibilities

Storage:

Keep away from dust and direct sunlight. Store at 2-35˚C. Do not freeze. Keep away from source of ignition. Keep away from incompatible substances, strong oxidant and strong acid.

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

Provide ventilation for receptacles

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

Protect from heat and direct sunlight

This product is hygroscopic

Protect from humidity and water

Store receptacle in a well ventilated area

7.3 Specific end use(s): No further relevant information available

8. Exposure Controls/Personal Protection

Additional information about design of technical facilities: No further data; see Section 7

8.1 Control parameters

Ingredients with limit values that require monitoring at the workplace:

107-21-1 Ethanediol:

TLV (USA) Short-term Value: C 100 mg/m^3 , H

IOELV (EU) Short-term Value: 104 mg/m^3, 40 ppm

IOELV (EU) Long-term Value: 52 mg/m^3, 20 ppm Skin

EL (Canada) Short-term Value: C 100* 20** mg/m^3, C 50*** ppm

EL (Canada) Long-term Value: 10** mg/m^3

(*Aerosol; **Particulate; ***Vapor)

64-17-5 Ethanol:

PEL (USA): 1900 mg/m^3, 1000 ppm

REL (USA): 1900 mg/m^3, 1000 ppm

TLV (USA) Short-term Value: 1880 mg/m^3, 1000 ppm

EL (Canada) Short-term Value: 1000 ppm

EV (Canada): 1900 mg/m^3, 1000 ppm

DNELs: No further relevant information available

PNECs: No further relevant information available

Additional Information: The lists valid during the making were used as basis

8.2 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 and skin

Respiratory protection:

Use suitable respiratory protective device in case of insufficient ventilation

Use suitable respiratory protective device when aerosol or mist is formed

Protection of hands:

 Protective gloves

The glove material has to be impermeable and resistant to the product/the substance/the preparation. Due to missing tests, no recommendation to the glove material can be given for the product/the preparation/the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

Material of gloves:

Sensibilization by the components in the glove materials is possible

The selection of suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material cannot be calculated in advance and therefore has to be checked prior to the application.

Penetration time of glove material:

The exact break through has to be found out by the manufacturer of the protective gloves and has to be observed

For the permanent, contact gloves made of the following materials are suitable:

Butyl rubber, BR

Nitrile rubber, NBR

Eye protection:

 Safety Glasses

Body protection: Protective work clothing

Limitation and supervision of exposure to the environment:

No further relevant information available

Risk management measures:

See Section 7 for additional information

Organizational measures should be in place for all activities involving this product

9. Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

General Information

Appearance:

Form: Liquid

Color: Colorless

Odor: Sweetish

Odor Threshold: Not determined

pH value at 20˚C: Not determined

Change in Condition

Melting Point/Melting Range: Undetermined

Boiling Point/Boiling Range: Undetermined

Flash Point: 91°F / 33°C (Closed-cup)

Flammability (solid, gaseous): Not applicable

Ignition Temperature: 770 °F / 410°C

Decomposition Temperature: Not determined

Self-igniting: Product is not self-igniting

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

Explosion limits:

Lower: 3.2 Vol %

Upper: 53 Vol %

Vapor Pressure at 20˚C: 59 hPa

Density at 20˚C: 1.11 g/cm^3

Relative Density: Not determined

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

9.2 Other information: No further relevant information available

10. Stability and Reactivity

10.1 Reactivity: No further relevant information available

10.2 Chemical Stability

Thermal decomposition/conditions to be avoided:

No decomposition if used and stored according to specifications

10.3 Possibility of Hazardous Reactions:

Can react violently with oxygen rich (oxidizing) material. Danger of Explosion

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

10.4 Conditions to Avoid:

Keep ignition sources away – Do not smoke

Store away from oxidizing agents

10.5 Incompatible Materials: No further relevant information available

10.6 Hazardous Decomposition Products:

Poisonous gases/vapors

Flammable gases/vapors

Carbon monoxide and carbon dioxide

11. Toxilogical Information

11.1 Information on Toxilogical Effects

Acute Toxicity:

LD/LC50 values relevant for classification:

107-21-1 Ethanediol:

Oral LD50 5840 mg/kg (rat)

Dermal LD50 9530 mg/kg (rabbit)

64-17-5 Ethanol:

Oral LD50 7060 mg/kg (rat)

Inhalative LD50/4 h 20000 mg/L (rat)

Primary Irritant Effect:

Inhalation/Ingestion: Moderate health hazard rating reflects unusual exposures via ingestion. This reagent is relatively safe when handled using good chemical hygiene by laboratory professionals and when enclosed in the analyzer hydraulic system.

On the Skin: Irritant to skin and mucous membranes

On the Eye: Irritating effect

Sensitization: No sensitizing effects known

Additional Toxilogical Information:

This product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:

Harmful

Inhalation of concentrated vapors as well as oral intake will lead to anesthesia-like conditions, headache, dizziness, etc.

Toxic and/or corrosive effects may be delayed up to 24 hours

Acute Effects (acute toxicity, irritation and corrosivity): Vapors have narcotic effect

Repeated Dose Toxicity: May cause damage to organs through prolonged or repeated exposure

12. Ecological Information

12.1 Toxicity

Aquatic Toxicity: No further relevant information is available

12.2 Persistence and Degradability: Biodegradable

12.3 Bioaccumulative Potential: Does not accumulate in organisms

12.4 Mobility in Soil: No further relevant information available

Ecotoxical Effects:

Remark: Harmful to fish

Additional Ecological Information:

General Notes:

This statement was deduced from the properties of the single components

Avoid transfer into the environment

Water Hazard Class (self-classification) in the concentrate

Water Hazard Class 1 (German Regulation) (Self-assessment): Slightly hazardous for water

Harmful to aquatic organisms

12.5 Results of PBT and vPvB assessment

PBT: Not applicable

vPvB: Not applicable

12.6 Other Adverse Effects: No further relevant information available

13. Disposal Considerations

13.1 Waste Treatment Methods

Recommendation: Disposal must be made according to official regulations

Recommended Cleansing Agents: Water, if necessary together with cleansing agents

14. Transport Information

14.1 UN-Number

DOT, IMDG, IATA: UN1170

14.2 UN Proper Shipping Name

DOT: FLAMMABLE LIQUID, N.O.S., mixture

ADR: 1170 ETHANOL (ETHYL ALCOHOL), MIXTURE

IMDG: ETHANOL (ETHYL ALCOHOL), MIXTURE

IATA: ETHANOL, MIXTURE

14.3 Transport Hazard Classes

DOT, IMDG, IATA:



Class: 3 Flammable liquids

Label: 3

ADR:



Class: 3 (F1) Flammable liquids

Label: 3

14.4 Packing Group

DOT, ADR, IMDG, IATA: III

14.5 Environmental Hazards:

Marine Pollutant: No

14.6 Special Precautions for User: Warning: Flammable liquids

Danger Code (Kemler): 30

EMS Number: F-E, S-D

14.7 Transport in Bulk According to Annex II of MARPOL73/78 and the IBC Code:

Not applicable

Transport/Additional Information:

ADR

Tunnel Restriction Code: D/E

14.8 UN "Model Regulation":

UN1993, FLAMMABLE LIQUID, N.O.S., mixture, 3, III

15. Regulatory Information

15.1 Safety, Health and Environmental Regulations/Legislation Specific for the Substance or Mixture

United States (USA)

SARA

Section 355 (Extremely Hazardous Substances): None of the ingredients is listed

Section 313 (Specific Toxic Chemical Listings):

107-21-1 Ethanediol

TSCA (Toxic Substances Control Act):

All ingredients are listed

Proposition 65 (California):

Chemicals Known to Cause Cancer: None of the ingredients is listed

Chemicals Known to Cause Reproductive Toxicity for Females:

None of the ingredients is listed

Chemicals Known to Cause Reproductive Toxicity for Males:

None of the ingredients is listed

Chemicals Known to Cause Developmental Toxicity:

Ethanol – listing refers specifically to alcohol beverage consumption and is not applicable for product

64-17-5 Ethanol

Carcinogenic Categories:

EPA (Environmental Protection Agency): None of the ingredients is listed

IARC (International Agency for Research on Cancer): None of the ingredients is listed

TLV (Threshold Limit Value Established by ACGIH):

107-21-1 Ethanediol

64-17-5 Ethanol

MAK (German Maximum Workplace Concentration):

64-17-5 Ethanol

NIOSH-Ca (National Institute for Occupational Safety and Health):

None of the ingredients is listed

OSHA-Ca (Occupational Safety and Health Administration):

None of the ingredients is listed

Canadian Domestic Substances List (DSL):

All ingredients are listed

Canadian Ingredient Disclosure List (limit 0.1%):

64-17-5 Ethanol

Canadian Ingredient Disclosure List (limit 1%):

107-21-1 Ethanediol

15.2 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.

Relevant Phrases:

H225 Highly flammable liquid and vapor

H302 Harmful if swallowed

R11 Highly flammable

R22 Harmful if swallowed

Abbreviations and Acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods DOT: US Department of Transportation

DOT: US Department of Transportation

IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and Labeling of Chemicals

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substance CAS:

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

Sources:

This document was authored and reviewed by the technical and scientific staff at Chem-Tel Inc. Descriptions, classifications and calculations are based upon data provided by manufacturer and augmented by published data in conjunction with expert analysis by degreed scientists.