

**Document Title:** Safety Data Sheet ClearCell® FX RBC Lysis Buffer 100ml  
**Document Number:** PD-SOP-06-17  
**SDS Version Number:** 1  
**Last Edited:** 23<sup>rd</sup> November 2018

---

## Safety Data Sheet

### ClearCell® FX RBC Lysis Buffer, 100mL

#### 1. Product and Company Identification

##### Product identifier

Reagent Trade Name: ClearCell® FX RBC Lysis Buffer, 100mL  
Product Code: CBB-F016007-C

##### Relevant identified uses of the product

For In Vitro Diagnostic Use

##### Company name and information

Company name	:	Biolidics Ltd
Company address	:	81 Science Park Drive #02-03 The Chadwick, Singapore Science Park 1 Singapore 118257
Emergency Telephone Number	:	+65 6482 0668
Telephone Number for Information	:	+65 6482 0668

Prepared by: Biolidics Ltd  
Tel: +65 6482 0668

#### 2. Hazards Identification

##### 2.1. Classification of the substance or mixture

###### Classification (GHS-US)

Not classified

##### 2.2. Label elements

###### GHS-US labeling

No labeling applicable

##### 2.3. Other hazards

No additional information available

##### 2.4. Unknown acute toxicity (GHS US)

No data available

#### 3. Composition/Information on Ingredients

##### 3.1 Substances

Not applicable

##### 3.2 Mixtures

Name	Product identifier	%	Classification (GHS-US)
Deionized water	(CAS No) 7732-18-5	> 90	Not classified

Component A	< 8		Acute Tox. 4 (Oral), H302 Eye Irrit. 2A, H319
Component B	< 1		Not classified
Component C	< 1		Not classified

#### 4. First Aid Measures

##### Description of first aid measures

First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

First-aid measures after inhalation : Assure fresh air breathing. Allow the victim to rest.

First-aid measures after skin contact : Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.

First-aid measures after eye contact : Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persist.

First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

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

Symptoms/injuries : Not expected to present a significant hazard under anticipated conditions of normal use.

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

No additional information available

#### 5. Fire Fighting Measures

<b>Suitable extinguishing media</b>	
Unsuitable extinguishing media	Do not use a heavy water stream.
<b>Special hazards arising from the substance or mixture</b>	
No additional information available	
<b>Advice for firefighters</b>	
Firefighting instructions	Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Avoid (reject) fire-fighting water to enter environment.

Protection during firefighting	Do not enter fire area without proper protective equipment, including respiratory protection.
--------------------------------	---

## 6. Accidental Release Measures

<b>6.1 Personal precautions, protective equipment and emergency procedures</b>	
<b>For non-emergency personnel</b>	
Emergency procedures	Evacuate unnecessary personnel.
<b>For emergency responders</b>	
Protective equipment	Equip cleanup crew with proper protection.
Emergency procedures	Ventilate area.

<b>6.2 Environmental precautions</b>	
Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.	

<b>6.3 Methods and material for containment and cleaning up</b>	
Methods for cleaning up	Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

<b>6.4 Reference to other sections</b>	
See Heading 8. Exposure controls and personal protection.	

## 7. Handling and Storage

<b>7.1 Precautions for safe handling</b>	
Precautions for safe handling	Wash hands and other exposed areas with mild soap and water before eat, drink or smoke and when leaving work. Provide good ventilation in process area to prevent formation of vapor.

<b>7.2 Conditions for safe storage, including any incompatibilities</b>	
Storage conditions	Keep only in the original container in a cool, well ventilated place away from : Keep container closed when not in use.
Incompatible products	Strong bases. strong acids.
Incompatible materials	Sources of ignition. Direct sunlight.

<b>7.3 Specific end use(s)</b>	
No additional information available	

## 8. Exposure Controls/Personal Protection

### 8.1 Control parameters

### 8.2 Exposure controls

Personal protective equipment	Avoid all unnecessary exposure.
Hand protection	Wear protective gloves.
Eye protection	Chemical goggles or safety glasses.
Respiratory protection	Wear approved mask.
Other information	When using, do not eat, drink or smoke.

## 9. Physical and Chemical Properties

### 9.1 Information on basic physical and chemical properties

Physical state : Liquid

Color : Clear.

Odor : None.

Odor threshold : No data available

pH : No data available

Relative evaporation rate (butyl acetate=1) : No data available

Melting point : No data available

Freezing point : No data available

Boiling point : No data available

Flash point : No data available

Self ignition temperature : No data available

Decomposition temperature : No data available

Flammability (solid, gas) : No data available

Vapor pressure : No data available

Relative vapor density at 20 °C : No data available

Relative density : No data available

Solubility : No data available

Log Pow : No data available

Log Kow : No data available

Viscosity, kinematic : No data available

Viscosity, dynamic : No data available

Explosive properties : No data available

Oxidizing properties : No data available

Explosive limits : No data available

### 9.2 Other information

No additional information available

## 10. Stability and Reactivity

### 10.1. Reactivity

No additional information available

### 10.2. Chemical stability

Not established.

### 10.3. Possibility of hazardous reactions

Not established.

### 10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

### 10.5. Incompatible materials

strong acids. Strong bases.

#### 10.6. Hazardous decomposition products

fume. Carbon monoxide. Carbon dioxide.

### 11. Toxicological Information

#### 11.1. Information on toxicological effects

Acute toxicity : Not classified

##### Component A

ATE (oral) 500.000 mg/kg body weight

##### Component B

LD50 oral rat 4220 mg/kg (Rat)

ATE (oral) 4220.000 mg/kg body weight

##### Component C

LD50 oral rat > 2000 mg/kg (Rat)

LD50 dermal rabbit > 5000 mg/kg (Rabbit)

Skin corrosion/irritation : Not classified

Serious eye damage/irritation : Not classified

Respiratory or skin sensitization : Not classified

Germ cell mutagenicity : Not classified Based on available data, the classification criteria are not met

Carcinogenicity : Not classified

Reproductive toxicity : Not classified Based on available data, the classification criteria are not met

Specific target organ toxicity (single exposure) : Not classified

Specific target organ toxicity (repeated exposure) : Not classified Based on available data, the classification criteria are not met

Aspiration hazard : Not classified Based on available data, the classification criteria are not met

Potential Adverse human health effects and symptoms : Based on available data, the classification criteria are not met.

### 12. Ecological Information

#### 12.1. Toxicity

Component B

LC50 fish 1 :7550 mg/l (96 h; Gambusia affinis; Fresh water)

EC50 Daphnia 1 :2350 mg/l (48 h; Daphnia magna)

LC50 fish 2 :8600 mg/l (96 h; Lepomis macrochirus)

Component C

LC50 fish 1 :320 mg/l (96 h; Poecilia reticulata; ANHYDROUS FORM)

EC50 Daphnia 1 > 100 mg/l (24 h; Daphnia magna)

EC50 other aquatic organisms 1 :403 mg/l (3 h; Activated sludge; ANHYDROUS FORM)

LC50 fish 2 :1827 mg/l (96 h; Lepomis macrochirus; ANHYDROUS FORM)

#### 12.2. Persistence and degradability

RBC Lysis Buffer

Persistence and degradability :Not established.

Component B

Persistence and degradability :Biodegradability: not applicable.

Biochemical oxygen demand (BOD) :Not applicable

Chemical oxygen demand (COD) :Not applicable

ThOD :Not applicable

BOD (% of ThOD) :Not applicable

Component C

Persistence and degradability :Not readily biodegradable in water.

Biochemical oxygen demand (BOD) :0.01 g O<sup>2</sup>/g substance

Deionized water (7732-18-5)

Persistence and degradability :Not established.

### 12.3. Bioaccumulative potential

RBC Lysis Buffer

Bioaccumulative potential :Not established.

Component B

Log Pow :-4.01 (Estimated value)

Bioaccumulative potential :Bioaccumulation: not applicable.

Component C

Bioaccumulative potential :No bioaccumulation data available.

Deionized water (7732-18-5)

Bioaccumulative potential :Not established.

### 12.4. Mobility in soil

No additional information available

### 12.5. Other adverse effects

Other information : Avoid release to the environment.

## 13. Disposal Considerations

### Waste treatment methods

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.

Ecology - waste materials : Avoid release to the environment.

## 14. Transport Information

<b>UN Number</b>	Void
<b>UN proper shipping name</b>	Void
<b>Transport hazard class(es)</b>	Void
<b>Packaging group</b>	Void
<b>Environmental hazards</b>	Water hazard class 2: hazardous for water
<b>Special precautions for use</b>	No relevant data available

## 15. Regulatory Information

### Safety, health and environmental regulations/legislation specific for the substance or mixture

<b>Section 355 (extremely hazardous substances):</b>
None of the ingredients is listed

<b>Section 313 (Specific toxic chemical listings):</b>
None of the ingredients is listed

<b>TSCA (Toxic Substances Control Act):</b>
All ingredients are listed

### Proposition 65

<b>Chemicals known to cause cancer:</b>
None of the ingredients is listed

<b>Chemicals known to cause reproductive toxicity for females:</b>
None of the ingredients is listed

<b>Chemicals known to cause reproductive toxicity for males:</b>
None of the ingredients is listed

<b>Chemicals known to cause developmental toxicity:</b>
None of the ingredients is listed

### Carcinogenic categories

<b>EPA (Environmental Protection Agency)</b>
None of the ingredients is listed

<b>TLV (Threshold Limit Value established by ACGIH)</b>
None of the ingredients is listed

<b>NIOSH-Ca (National institute for Occupational Safety and Health)</b>
None of the ingredients is listed

<b>OSHA-Ca (Occupational Safety and Health Administration)</b>
None of the ingredients is listed

### Product related hazard information

Observe the general safety requirements when handling chemicals.

This product is not subject to identification regulations according to directives on hazardous materials.

### Chemical safety assessment

A Chemical Safety Assessment has not been carried out.



## 16. Other Information

The information provided in this document is believed to be accurate based on current knowledge and is to be used only as a guide with regards to appropriate safety precautions. This cannot be used as a guarantee for product features/properties. Biolidics Ltd is not held liable for any damage resulting from handling or from contact with the above product.