## 1 Identification

### GHS Product Identifier

MultiCyt Cell Membrane Integrity Dye (FL4)
iQue PLUS BL4
Contains: Dimethylsulfoxide 60% , Monomeric cyanine nucleic acid stain

### Other means of identification

Product Number: 90350-90352

### Recommended use of the chemical and restriction on use

**SU24** scientific research and development.
This product is manufactured and sold by IntelliCyt Corporation for research use only. The kit and components are not intended for diagnostic or therapeutic use.

### Supplier's details

IntelliCyt Corporation
9620 San Mateo Blvd. NE
Albuquerque, NM 87113
USA

### Emergency phone number

+1 505-345-9075

## 2 Hazard(s) identification

### Classification of the substance or mixture

**Health Hazard**

| Category | Hazard |
|---|---|
| 2 | skin irritation |
| 2A | serious eye irritation |

**Physical Hazard**

| Category | Hazard |
|---|---|
| 4 | flammable liquid |

### GHS label elements

Warning

Combustible liquid

Harmful if swallowed or in contact with skin

Causes mild skin irritation

Causes serious eye irritation

If medical advice is needed, have product container or label at hand.

Keep container tightly closed.

Do not breathe dust/fume/gas/mist/vapours/spray.

Do not eat, drink or smoke when using this product.

Contaminated work clothing should not be allowed out of the workplace.

Avoid release to the environment.

Wear protective gloves/protective clothing/eye protection/face protection.

Rinse mouth.

Store separately.

## 3 Composition/information on ingredients

| Description | CAS Number | EINECS Number | % | Note |
|---|---|---|---|---|
| dimethylsulfoxide | 67-68-5 | 200-664-3 | 60 | |

## 4 First-aid measures

### Description of necessary first-aid measures

**Eye Exposure**: Hold eye open and rinse slowly and gently flush with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

Clothing and/or Skin Exposure: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for further treatment advice

**If Inhaled**: Move person to fresh air. Call a poison control center or doctor for further treatment advice.

**If Swallowed**: Call a poison control center or physician immediately for treatment advice. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

## 5 Fire-fighting measures

### Suitable extinguishing media

Use alcohol-resistant foam, carbon dioxide, water, or dry chemical spray.
Use water spray to cool fire-exposed containers.

### Specific hazards arising from the chemical

No unique hazards.

### Special protective actions for fire-fighters

Incipient fire responders should wear eye protection. Structural firefighters must wear Self-Contained Breathing Apparatus and full protective equipment. Isolate materials not yet involved in the fire and protect personnel. Move containers from fire area if this can be done without risk; otherwise, cool with carefully applied water spray. If possible, prevent runoff water from entering storm drains, bodies of water, or other environmentally sensitive areas.

## 6 Accidental release measures

### Personal precautions, protective equipment and emergency procedures

Avoid raising and breathing dust, and provide adequate ventilation. As conditions warrant, wear a NIOSH approved self-contained breathing apparatus, or respirator, and appropriate personal protection (rubber boots, safety goggles, and heavy rubber gloves).

### Environmental precautions

Take steps to avoid release into the environment, if safe to do so.

### Methods and materials for containment and cleaning up

Contain spill and collect, as appropriate. Transfer to a chemical waste container for disposal in accordance with local regulations.

## 7 Handling and storage

### Precautions for safe handling

Avoid breathing dust/fume/gas/mist/vapours/spray. Avoid prolonged or repeated exposure.

### Conditions for safe storage, including any incompatibilities

Keep container tightly closed. Store in accordance with information listed on the product insert.

## 8 Exposure controls/personal protection

### Control parameters

Facilities storying or using this material should be equipped with eyewash facility and a safety shower. Use process enclosures and local exhaust ventilation.

### Appropriate engineering controls

Use mechanical exhaust or laboratory fumehood to avoid exposure.

### Individual protection measures

**Respiratory protection**: Respiratory protection is not required.

**Hand protection**: Handle with gloves. Inspect gloves prior to use.
Gloves: Natural latex, Natural rubber, Nitrile.
Use proper glove removal technique (without touching glove's surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

**Skin protection**: Choose skin protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place. For this product wear lab coat.

**Eye/face protection**: Wear safety glasses with side shields, chemical splash goggles, or full face shield, if

necessary. Base the choice of protection on the job activity and potential for contact with eyes or face. An emergency eye wash station should be available.

**Environmental Exposure Controls**: Avoid release to the environment and operate within closed systems wherever practicable. Air and liquid emissions should be directed to appropriate pollution control devices. In case of spill, do not release to drains. Implement appropriate and effective emergency response procedures to prevent release or spread of contamination and to prevent inadvertent contact by personnel.

**Other protective measures**: Wash hands in the event of contact with this product/mixture, especially before eating, drinking or smoking. Protective equipment is not to be worn outside the work area (e.g., in common areas or out-of-doors).

## 9 Physical and chemical properties

### Physical and chemical properties

Dimethylsulfoxide

| | |
|---|---|
| Physical State | Liquid |
| Appearance | Colorless |
| Odor | Odorless |
| Odor Threshold | N/A |
| pH | 8.5 |
| Melting Point/Range | N/A |
| Boiling Point/Range | 189°C (372°F) |
| Flash Point | 89°C (192°F) Closed Cup, 95°C (203°F) Open Cup |
| Evaporation Rate | 0.026 (n-butyl acetate = 1) |
| Flammability (solid,gas) | N/A |
| Flammability/explosive limits | |
| Upper | 3.0-3.5% by volume |
| Lower | 42-63% by volume |
| Vapor Pressure | 0.55 mbar (0.46 mmHg) @ 20°C (68°F) |
| Vapor Density | 2.7 |
| Specific Gravity | 1.1 @ 20°C (68°F) (water=1) |
| Solubility | Miscible |
| Partition coefficient; n-octanol/water | Not measured |
| Autoignition Temperature | 300-302°C (572-575°F) |
| Decomposition Temperature | Not measured |
| Viscosity | 2.0 mPas or cP (@ 25°C/77°F) |

## 10 Stability and reactivity

### Reactivity

No data available

### Chemical stability

Stable.

### Possibility of hazardous reactions

No data available

### Conditions to avoid

N/A

### Incompatible materials

N/A

### Hazardous decomposition products

No decomposition products.

## 11 Toxicological information

### Toxicological (health) effects

The toxological effects of this product have not been thoroughly studied.

### Numerical measures of toxicity (such as acute toxicity estimates)

Dimethylsulfoxide

| | | |
|---|---|---|
| Oral | LD50 | Oral 14500 mg/kg (rat) |
| Dermal | LD50 | Dermal 40000 mg/kg (rat) |
| Inhalative | LC50/4 h Inhalative | 40,25 mg/l (rat) |

### Interactive effects

No data available.

### Information on the likely routes of exposure

Skin contact. Inhalation.

### Symptoms related to the physical, chemical and toxicological characteristics

No data available.

### Delayed and immediate effects and also chronic effects from short and long term exposure

No data available

## 12 Ecological information

### Toxicity

Aquatic Ecotoxicity

| Ingredient | 96 hr LC50 fish, mg/l | 48 hr EC50 crustacea, | ErC50 algae, mg/l |
|---|---|---|---|

| | | | |
|---|---|---|---|
| | | mg/l | |
| Methane, sulfinylbis- - (67-68-5) | 34,000.00, Pimephales promelas | 25,000.00, Daphnia magna | 12,350.00 (96 hr), Skeletonema costatum |

**Persistence and degradability**

No data available.

**Bioaccumulative potential**

No data available.

**Mobility in soil**

No data available.

## 13 Disposal considerations

**Disposal methods**

Dispose of waste according to directive 2008/98/EC, covering waste and dangerous waste. Do not send down the drain or flush down the toilet. All wastes containing the material should be properly labeled. Rinse waters resulting from spill cleanups should be discharged in an environmentally safe manner, e.g., appropriately permitted municipal or on- site wastewater treatment facility.

## 14 Transport information

**UN Number**

N/A

**UN Proper Shipping Name**

N/A

**Transport hazard class(es)**

N/A

**Packing group, if applicable**

N/A

**Environmental hazards**

N/A

**Special precautions for user**

No data available.

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

N/A

## 15 Regulatory information

**Safety, health and environmental regulations specific for the product in question**

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and

Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments.

## 16 Other information

### Other information

The statements contained herein are offered for informational purposes only and are based upon technical data. IntelliCyt Corporation believes them to be accurate at the date of publication, but does not purport to be all-inclusive. The above-stated product is intended for use only by persons having the necessary technical skills and facilities for handling the product at their discretion and risk. Since conditions and manner of use are outside our control, we (IntelliCyt Corporation) make no warranty of merchantability or any such warranty, express or implied with respect to information and we assume no liability resulting from the above product or its use. Users should perform their own investigations to determine suitability of information and product for their particular purposes.