

**Optimal Hypotonic (1000mls)**

ProCell™ Reagents

Cat GGS-JL-005/b

Pack size supplied -powder to make up 1000 mls working solution

Patent Pending

**GTIN-13:** 5060174130106

Date of original issue: January 2012

Date of current issue: January 2015

Revision date: June 2015

**PRODUCT DESCRIPTION**PRODUCT DESCRIPTION

**Optimal Hypotonic Solution** is a newly formulated hypotonic solution which achieves optimum metaphase swelling (spreading) from difficult cells that are prone to either under-spread or overspread, and where conventional hypotonics achieve inadequate cell swelling. Optimal Hypotonic Solution increases cell volume allowing the chromosomes more room to spread out. Well spread chromosomes with few cross-overs greatly aid analysis. Although developed for acute leukaemia bone marrows and tumour specimens, it has also proved useful with problem blood cultures and other problematic sample types.

PROCEDURE

1. Add the contents of the supplied bottle to a 1000 ml volumetric flask.
2. Bring to 1000 ml with milli-Q water or reverse osmosis-filtered deionised water.
3. Store at 4°C in a clean glass bottle, noting down the date on the bottle.
4. During harvest replace your existing hypotonic solution with Optimal Hypotonic Solution.
5. Replace your existing hypotonic and incubate cells at 37 degrees C for a maximum of 30 minutes.
6. Add approximately 0.5ml (several pipette drops) of fresh fixative (normally 3:1 methanol:acetic acid ratio or whatever is the laboratory standard ratio) before centrifuging.
7. Continue with your usual harvesting protocol.

QUALITY CONTROL

All batches are tested on established lymphoid/myeloid cell-lines with spreading assessed using phase contrast microscopy.

STORAGE

Store the dissolved product at 4°C away from UV light for no more than 2 weeks.

The powdered product can be stored at Room Temperature for 12 months.

Never heat or freeze.

**IDENTIFICATION OF THE SUBSTANCE AND THE COMPANY**

**Product:** Cat# GGS-JL-005/b **Optimal Hypotonic (powder for 1000mls)**

**A Laboratory Reagent** for research purposes only. **Strictly Not for Human Therapeutic Use**

**Company details:**

Genial Genetics  
The Printworks  
Sealand Road  
Chester  
CH1 4QS  
United Kingdom

Combined Telephone and Fax Number: +44 (0) 1244 757 155

**COMPOSITION AND COMPONENT DATA**

Proprietary product, an aqueous solution containing a complex mixture of organic ingredients, with sodium and other salts.

HAZARDS IDENTIFICATION

Not harmful by inhalation, with skin contact and if swallowed.

**FIRST-AID MEASURES**AFTER INHALATION

Not applicable

AFTER EYE CONTACT

Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally.

#### AFTER INGESTION

If swallowed, wash out mouth with water provided person is conscious. If ingested - Give large quantities of water.

#### AFTER SKIN CONTACT

Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse.

### **FIRE FIGHTING MEASURES**

Not applicable.

#### ACCIDENTAL RELEASE MEASURES

Wear a lab coat and rubber gloves wipe with paper tissues and place in plastic bag for proper disposal.

#### HANDLING AND STORAGE

Keep container tightly closed when not in use.  
Store prepared working solution at 4°C.

### **EXPOSURE CONTROL AND PERSONAL PROTECTION**

Only work in a Class 2 Biological Safety Cabinet.  
Always wear a lab coat and rubber gloves.  
Wash hands after handling.

#### PHYSICAL AND CHEMICAL PROPERTIES

Appearance: white powder  
Boiling Point: As for water (prepared working solution)  
Vapour Pressure (pascals): As for water (prepared working solution)  
Specific Gravity: 1.4 (Water = 1) (prepared working solution)

Flashpoint: N/A  
Flammability Limits (%): N/A  
Incompatible with strong oxidising agents  
Incompatible with acids  
Incompatible with freezing.

#### TOXICOLOGICAL INFORMATION

To the best of our knowledge, the chemical, physical and toxicological properties have not been thoroughly investigated.

Not a known carcinogen.

#### STABILITY AND REACTIVITY

Product is stable

### **ECOLOGICAL INFORMATION**

#### **Toxicology**

No data available

#### **Persistence and degradability**

No data available

#### **Bioaccumulative potential**

No data available

#### DISPOSAL CONSIDERATIONS

Use approved government contractor.  
Observe all International, National, State and Local environmental laws.

#### **Contaminated packaging**

Dispose of as unused product.

### **TRANSPORT INFORMATION**

Does not contain DOT classified ingredients.

Not regulated as a hazardous material.

### **REGULATORY INFORMATION**

S 36/ 37 – Wear suitable protective clothing and gloves  
S 7/ 47 – Keep container tightly closed and at temperature not exceeding 4°C (dissolved product)

#### OTHER INFORMATION

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. Genial Genetic Solutions Ltd shall not be held liable for any damage resulting from handling or from contact with the above product.