

## Metaphase Arresting Solution

Cat GGS-JL-008

Pack size Supplied to make up 100mls

**GTIN-13:** 5060174130076

Date of original issue: January 2012

Date of current issue: January 2015

Revision date: June 2015

## ProCell™ Reagents

Patent Pending



Health	4
Fire	1
Reactivity	0
Personal Protection	J

## PRODUCT DESCRIPTION

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#### **Metaphase Arresting Solution**

Is a mixture of colchicine/vinblastine sulphate dissolved in PBS. Both compounds inhibit the formation of mitotic spindles and are used to increase the percentage of metaphase cells for chromosome studies. Vinblastine sulphate has been found to be more effective against bone marrows, difficult tumours and problematic tissues with low mitotic indexes, and where colchicine/colcemid appears to be ineffective.

### PROCEDURE

Dissolve the contents of the supplied vial with 100ml of milli-Q or reverse osmosis filtered deionised water.

1. Use Metaphase Arresting Solution as a direct replacement for colchicine/colcemid in your harvest, keeping volume and incubation time and temperature the same as usual.
2. After incubation continue with your usual harvest protocols.

### QUALITY CONTROL

All batches are tested on established bone marrow and tumour cell-lines with mitotic index and morphology scored under a compound microscope

### STORAGE

Not for drug use

Store at 4°C for no more than 12 months.

Never heat or freeze.

Protect from UV light.

For laboratory research use only.

## IDENTIFICATION OF THE SUBSTANCE AND THE COMPANY

**Product:** Cat# GGS-JL-008 **Metaphase Arresting Solution**

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

#### **Company details:**

Genial Genetics  
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## COMPOSITION AND COMPONENT DATA

Proprietary product containing a mixture of colchicine and vinblastine sulphate.

### HAZARDS IDENTIFICATION

**WARNING – Limited quantity of Colchicine and Vinblastin Sulfate:** Product is toxic. Product is harmful by inhalation, skin contact and if swallowed.

Component	Composition	Classification	By %
<b>Colchicine</b>	C <sub>22</sub> H <sub>25</sub> NO <sub>6</sub>	Acute Tox. 2; Acute Tox. 1; Eye Dam. 1; Muta. 1B; H300 + H330, H318, H340	50% powder in supplied vial
CAS No: 64-86-8 EC No: 200-598-5	----- -----	----- -----	----- -----
<b>Vinblastin Sulfate</b>	C <sub>46</sub> H <sub>58</sub> N <sub>4</sub> O <sub>2</sub> H <sub>2</sub> SO <sub>4</sub>	Acute Tox. 4; Skin Irrit. 2; Eye Dam. 1; STOT SE 3; H315, H318, H335	10% powder in supplied vial
CAS No: 143-67-9 EC No: 205-606-0	----- -----	----- -----	----- -----

See [Regulatory Information](#) at the end of the MSDS for full R, S H, and P details.

## FIRST-AID MEASURES

### AFTER INHALATION

Remove from exposure, if difficulty in breathing seek medical advice.

### AFTER EYE CONTACT

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

### AFTER INGESTION

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

### 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. Seek medical advice if skin has been severely exposed.

## FIRE FIGHTING MEASURES

Not flammable, but will emit toxic fumes under fire conditions.

### ACCIDENTAL RELEASE MEASURES

Avoid raising dust. Wear self-contained breathing apparatus. 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.

Stored in dark container at 4°C, prepared working solution is stable for 12 months.

Powdered stock product is stable at 4°C for 12 months.

## EXPOSURE CONTROL AND PERSONAL PROTECTION

Only work in a Class 2 Biological Safety Cabinet or Cytotoxic Cabinet.

Always wear a lab coat and rubber gloves.

Wash hands after handling.

### PHYSICAL AND CHEMICAL PROPERTIES

Appearance: white/yellow powder

Boiling Point: As for water (for prepared working solution)

Vapour Pressure (pascals): As for water (for prepared working solution)

Specific Gravity: 1.2 (for prepared working solution)

Flashpoint (%): N/A

Flammability Limits (%): N/A

Incompatible with strong oxidising agents

Incompatible with acids

Incompatible with freezing.

### TOXICOLOGICAL INFORMATION

Very toxic

Carcinogen.

Teratogen

### STABILITY AND REACTIVITY

Incompatible with strong oxidising agents.

## ECOLOGICAL INFORMATION

### **Toxicology**

Very Toxic

### **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



### **Limited quantities apply**

Contains:

UN1544 PG: II

UN1544

DOT Classification: Class 6.1: Poisonous material.

## Regulatory Information

EC Index no: 614 – 005 – 00 – 6 - Very Toxic  
 R 26/ 27/ 28 – Very toxic by inhalation, in contact with skin and if swallowed  
 R 40 – limited evidence of a carcinogenic effect  
 R 46 – may cause heritable genetic damage  
 S 36/ 37/ 39 – Wear suitable protective clothing, gloves and eye/face protection  
 S 7/ 47 – Keep container tightly closed and at temperature not exceeding 4°C  
 S 41 – In case of fire and/or explosion do not breath fumes  
 S 56 – Dispose of this material and its container at a hazardous or special waste collection point

Warning! This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.



### Limited quantities apply

Contains:  
 UN1544 PG: II  
 UN1544

#### HMIS (USA)

- Health Hazard: 4
- Fire Hazard: 1
- Reactivity: 0
- Personal Protection: j

#### National Fire Protection Association (USA)

- Health Hazard: 4
- Flammability: 1
- Reactivity: 0
- Specific Hazard: None

#### 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.