IMMUNOLOGICAL SCIENCES Product Data Sheet

DMEM High Glucose

w/ stable L-Glutamine, w/ Sodium Pyruvate

CAT N° : ISL0103-500

Theoretical pH : 7.3 ± 0.3

Osmolality : 331 mOsm/kg ± 10 %

Colour : Red solution

Storage conditions : +2°C to +8°C

Shelf life : 24 months

Endotoxin : <1 EU/ml

Sterility tests :

- Bacteria in aerobic and anaerobic conditions
- Fungi and yeasts

Cell growth test :
Medium tested for the ability to support cell growth with L929 cell line.

Composition : Displayed on web site; also available on request

Recommended use :
- Respect storage conditions of the product
- Do not use the product after its expiry date
- Store product in an area protected from light (not necessary for saline solutions).
- Manipulate the product in aseptic conditions (e.g. : under laminar air flow)
- Wear clothes adapted to the manipulation of the product to avoid contamination (e.g. : gloves, mask, hygiene cap, overall…)

The product is intended to be used in vitro, in laboratory only. Do not use it in therapy, human or veterinary applications.

Description :
Lots of modifications of Eagle's medium have been developed since the creation of the first formulation. The most used Eagle's medium is the Dulbecco's Modified Eagle's Medium (DMEM).
It is a modification of Basal Medium Eagle (BME) that contains a concentration more important of amino acids and vitamins and also supplementary components. The original formulation contained 1000mg/l of glucose and was used to culture embryonic mouse cells. The used of 4500mg/l of glucose in the medium show an optimal cell growth for some cell lines.
The stable Glutamine prevents the intramolecular cyclization reaction associated with solutions of L-Glutamine. This derivative is therefore stable in solution and allows the formulation of cell culture media containing L-Glutamine that may be stored at 4°C for extended periods. The dipeptide is metabolized within the cells to yield L-Glutamine plus a second amino acid.

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Product name : DMEM High Glucose w/ stable Glutamine w/ Sodium Pyruvate

CAS Number	Components	Quantity in g/l
10035-04-8	Calcium Chloride Dihydrate	0.26500000
7487-88-9	Magnesium Sulfate Anhydrous	0.09767000
7782-61-8	Ferric Nitrate Nonahydrate	0.00010000
7447-40-7	Potassium Chloride	0.40000000
7647-14-5	Sodium Chloride	6.40000000
7558-80-7	Sodium Phosphate Monobasic Anhydrous	0.10900000
50-99-7	D-Glucose Anhydrous	4.50000000
56-40-6	Glycine	0.03000000
39537-23-0	L-Alanyl-L-Glutamine	0.86200000
1119-34-2	L-Arginine Monohydrochloride	0.08400000
30925-07-6	L-Cystine Dihydrochloride	0.06260000
5934-29-2	L-Histidine Monohydrochloride Monohydrate	0.04200000
73-32-5	L-Isoleucine	0.10500000
61-90-5	L-Leucine	0.10500000
657-27-2	L-Lysine Monohydrochloride	0.14600000
63-68-3	L-Methionine	0.03000000
63-91-2	L-Phenylalanine	0.06600000
56-45-1	L-Serine	0.04200000
72-19-5	L-Threonine	0.09500000
73-22-3	L-Tryptophan	0.01600000
69847-45-6	L-Tyrosine Disodium Salt Dihydrate	0.10379000
72-18-4	L-Valine	0.09400000
67-48-1	Choline Chloride	0.00400000
137-08-6	D-Ca Pantothenate	0.00400000
59-30-3	Folic Acid	0.00400000
87-89-8	Myo-Inositol	0.00720000
98-92-0	Nicotinamide (Nicotinic acid amide)	0.00400000
58-56-0	Pyridoxine Hydrochloride	0.00400000
83-88-5	Riboflavin	0.00040000
67-03-8	Thiamine Hydrochloride	0.00400000
34487-61-1	Phenol Red Sodium Salt	0.01590000
113-24-6	Sodium Pyruvate	0.11000000
144-55-8	Sodium Bicarbonate	3.70000000
WATER		982.48734000

For Research use only

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Web-site: www.immunologicalsciences.com - E-Mail: info@immunologicalsciences.com

Uses :
Supplements, such as antibiotics, should be added as sterile supplements to the medium. Storage conditions and shelf-life of supplemented products will be affected by the nature of the supplements.

Signs of deterioration :
Medium should be clear and free of particulate and flocculent material.
Do not use this medium if it is cloudy or contains precipitate.
Other evidence of deterioration may include colour change or degradation of physical or performance characteristics.