

# Corning® cellgro® glutagro™ Supplement

## Technical Sheet

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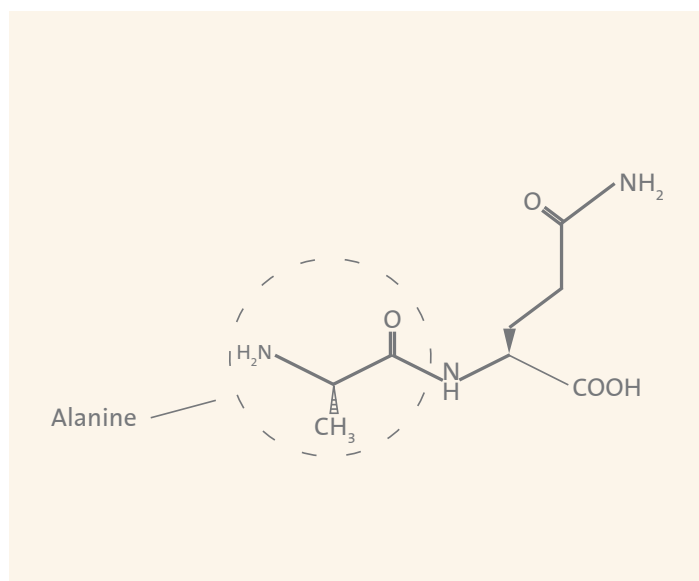
A dipeptide derivative of L-glutamine, glutagro supplement incorporates L-alanine that protects glutamine's unstable alpha amino acid group. Aminopeptidases within cells cleave the dipeptide, gradually releasing both L-glutamine and L-alanine for use.

L-glutamine is an amino acid integral to virtually all mammalian and insect cells grown in culture. It is an energy source, incorporated into protein, and used in nucleic acid metabolism.

The dipeptide can withstand autoclaving due to the addition of the alanyl group, while L-glutamine is nearly completely degraded when exposed to the same conditions.

We offer many standard formulations of media with and without L-glutamine. All standard cellgro culture media have undergone stability studies to establish expiration dating consistent with product functionality. Our standard formulations containing L-glutamine are guaranteed for superior performance through the expiration date when properly stored.

On average, in classical formulations, the half-life of L-glutamine is 15-21 months. These data show the relationship between L-glutamine and ammonium levels during proper storage of standard DMEM formulation.



Molecular Structure

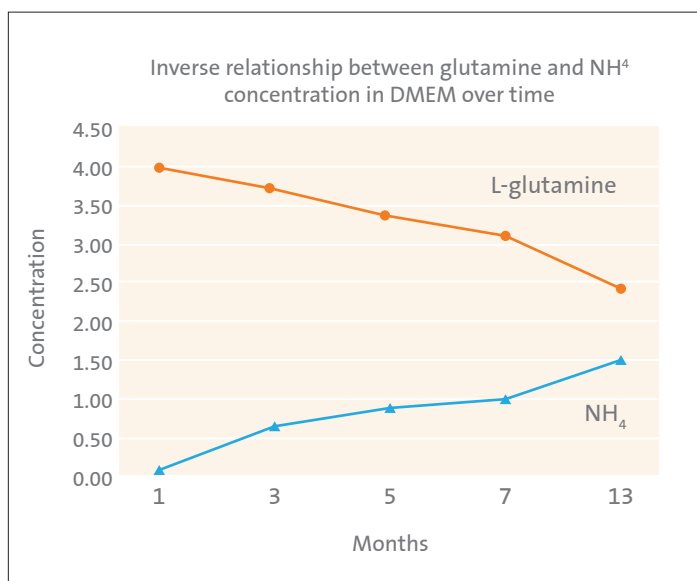


Figure 1. The two levels are inversely related over time. This is also true for other common media formulations such as RPMI 1640 (data not shown).

## Product Specifications

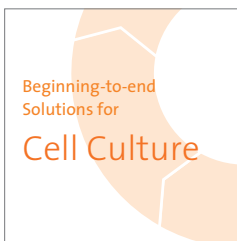
pH	5.5-5.9 at 20°C-25°C
Osmolality	438-498 mOsm/kg H <sub>2</sub> O
Endotoxin	<0.25 EU/mL
Sterility by USP	Pass
Mycoplasma	Tested negative
Cell Culture Testing	Pass
Molecular Weight	217.2
Formula	C <sub>8</sub> H <sub>15</sub> N <sub>3</sub> O <sub>4</sub>
Working Concentration	Refer to table below for the necessary amount to add
Storage and Stability	This product has a shelf life of 24 months when refrigerated or stored at ambient temperatures (2°C to 30°C) and protected from light
Shipping	Ambient

## Supplement Chart

Media	mM	L-glutamine, powder (Cat. No. 61-030-RM/RO/RR) mg/L of media	200 mM L-glutamine (Cat. No. 25-005-CI/CV), or 200 mM cellgro® glutagro™ (Cat. No. 25-015-CI) mL/L of media
AMEM	2.00	292	10.0
BME	2.00	292.3	10.0
DMEM	4.00	584	20.0
DMEM/F12	2.48	362.1	12.4
F12K	2.00	292	10.0
Ham's F-10	1.00	146.2	5.0
Ham's F-12	1.00	146.2	5.0
Iscove's DMEM	4.00	584	20.0
M199	0.68	100	3.4
EMEM	2.00	292	10.0
RPMI 1640	2.05	300	10.3
MCDB131	10.00	1461.5	50.0

## Ordering Information

Cat. No.	Description	Unit Size (mL)	Qty/Pk
25-015-CI	cellgro glutagro™ medium and supplement	100	1
10-101-CV	DMEM with glutagro supplement	500	6
10-102-CV	DMEM without sodium pyruvate	500	6
10-103-CV	DMEM/F-12 with glutagro supplement	500	6
10-104-CV	RPMI 1640 with glutagro supplement	500	6



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At Corning, cells are in our culture. In our continuous efforts to improve efficiencies and develop new tools and technologies for life science researchers, we have scientists working in Corning R&D labs across the globe, doing what you do every day. From seeding starter cultures to expanding cells for assays, our technical experts understand your challenges and your increased need for more reliable cells and cellular material.

It is this expertise, plus a 160-year history of Corning innovation and manufacturing excellence, that puts us in a unique position to offer a beginning-to-end portfolio of high-quality, reliable cell culture consumables.

For additional product or technical information, please visit [www.cellgro.com](http://www.cellgro.com) or call 1.800.235.5476.

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