

 Nucleus Biologics	<h2>Customer Description/ Part Name</h2>	Document #: <b>00-SPEC-XXX-XXX</b>
		Revision:
		Effective Date: <b>See iGMP</b>
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Owner Process: <b>19 - Custom FP Mfg.</b>	Doc Owner: <b>SVP of Operations</b>	CR#:
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Product Material Specification										
<b>Confidential</b> Yes <input type="checkbox"/> No <input type="checkbox"/>	If yes, what is the customer code:									
Special Designation	Animal Source <input type="checkbox"/>	Antibiotic <input type="checkbox"/>	Steroid <input type="checkbox"/>	N/A <input type="checkbox"/>						
Nucleus Biologics Description										
Final Product Part Number										
Manufacturer										
Unit of Measure (UOM)										
Expiration Date										
Storage Requirements Prior to QC Testing										
Storage Requirements										
Shipping Requirements										
Packaging	1.00000 ± 0.00500 L in 1.00000 <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 25%;">Part Number</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>251</td> <td>PET Sterile Media Bottle with Tamper-Evident cap PTC1000S-A</td> </tr> <tr> <td>1022</td> <td>PET Corning Tamper Evident btl 1000mL, Fisher, 07-201-428</td> </tr> </tbody> </table>				Part Number	Description	251	PET Sterile Media Bottle with Tamper-Evident cap PTC1000S-A	1022	PET Corning Tamper Evident btl 1000mL, Fisher, 07-201-428
Part Number	Description									
251	PET Sterile Media Bottle with Tamper-Evident cap PTC1000S-A									
1022	PET Corning Tamper Evident btl 1000mL, Fisher, 07-201-428									
Documentation										
Quality Control Testing Requirements										
Ingredients per Liter	<b>Abbreviations:</b> ACF=Animal Component Free BP= British Pharmacopeia ChP= China Pharmacopeia EP= European Union Pharmacopeia FCC=Food Chemical Codex JP= Japan Pharmacopeia NA= not available NF-National Formulary QS = Quantity Sufficient USP = United States Pharmacopeia  <b>Powder Components:</b>									



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Part Number	Part Name	CAS#	Grade/Purity	Concentration (g/L)
369 501 826	L-Tryptophan L-Tryptophan-2 L-Tryptophan-3	73-22-3	EP, JP, USP USP BP, EP, JP, USP	0.0050000000
1153 365	Glycine-2 Glycine	56-40-6	98.5 to 101.0 % EP, JP, USP	0.0100000000
360	L-Phenylalanine	63-91-2	EP, JP, USP	0.0150000000
359	L-Methionine	63-68-3	EP, JP, USP	0.0150000000
354 820 821	L-Histidine L-Histidine-2 L-Histidine-3	71-00-1	EP, JP, USP BP, EP, FCC, JP, USP BP, EP, JP, USP	0.0150000000
366	L-Proline	147-85-3	EP, JP, USP	0.0200000000
755	Hydroxy L-Proline	51-35-4	99.0%	0.0200000000
364 724 824	L-Aspartic Acid L-Aspartic Acid-2 non-animal source L-Aspartic Acid-3	56-84-8	EP, JP, USP EP, JP, USP USP	0.0200000000
581 353 472 535 545 728	L-Glutamic Acid-5 L-Glutamic Acid L-Glutamic Acid-2 L-Glutamic Acid-3 L-Glutamic Acid-4 L-glutamic acid-6 non-animal source	56-86-0	EP, JP, USP EP 99.0% BP, EP, USP FCC EP	0.0200000000
371	L-Valine	72-18-4	EP, JP, USP	0.0200000000
368 825	L-Threonine L-Threonine-2	72-19-5	EP, JP, USP JP, USP	0.0200000000
761 765 840	L-Tyrosine Disodium Salt Dihy L-Tyrosine Disodium Salt Dihyd L-Tyrosine Disodium Salt Dihydrate	122666-87-9	98% ACF 99%	0.0288300000
367	L-Serine	56-45-1	EP, JP, USP	0.0300000000
358 822 823	L-Lysine HCL L-Lysine HCL-2 L-Lysine HCL-3	657-27-2	EP, JP, USP BP, EP, JP, USP BP, EP, FCC, JP, USP	0.0400000000
357	L-Leucine	61-90-5	EP, JP, USP	0.0500000000
497 606 839	L-Asparagine Anhydrous L-Asparagine Anhydrous-2 L-Asparagine Anhydrous-3	70-47-3	99% N/A 95%	0.0500000000
356 611 744 756	L-Isoleucine L-Cystine Dihydrochloride-2 L-Cystine dihydrochloride-3 L-Cystine Dihydrochloride	73-32-5 30925-07-6	EP, JP, USP 98.0-102.0% 97.0% 98.0%	0.0500000000 0.0651500000
351	L-Arginine	74-79-3	EP, JP, USP	0.2000000000
344	L-Glutamine Powder	56-85-9	DAB, JP, USP	0.3000000000
427 479 540	Magnesium Sulfate Anhy. Powder Magnesium Sulfate Anhydrous Magnesium Sulfate Anhydrous-2	7487-88-9	USP ACS USP	0.0488400000
533 720	Calcium Nitrate Tetrahydrate	13477-34-4	99.0 - 103.0 % ACS	0.1000000000



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		Calcium Nitrate Tetrahydrate-2			
554		Potassium Chloride	7477- 40-7	BP, EP, JP, USP	0.4000000000
750		Sodium Phosphate Dibasic Anhy	7558- 79-4	USP	0.8000000000
555 881 1331		Sodium Bicarbonate Sodium Bicarbonate-2 Sodium Bicarbonate-3	144-55- 8	BP, EP, JP, USP BP, EP, JP, USP =99.5%	2.0000000000
340 556		Sodium Chloride Powder Sodium Chloride	7647- 14-5	99.5% BP, EP, JP, USP	6.0000000000
468 655		Glutathione Reduced L-Glutathione Reduced-2	70-18-8	98% 98%	0.0010000000
730 583		Phenol Red sodium salt-2 Phenol Red Sodium Salt	34487- 61-1	ACS ACS	0.0053000000
490 534 577		D-Glucose D-Glucose-2 D-Glucose-3	50-99-7	ACS, NF, USP BP, EP, JP, USP BP, EP, JP, USP	2.0000000000
818 489 732		Vitamin B12-3 Vitamin B12 Vitamin B12-2	68-19-9	BP, EP, USP 98% USP	0.0000050000
644 814		Biotin D-Biotin	58-85-5	99% USP	0.0002000000
466 819 830		Riboflavin Vitamin B2 Vitamin B2-2	83-88-5	FCC USP USP	0.0002000000
460		D-Calcium Pantothenate	137-08- 6	USP	0.0002500000
464		Para-aminobenzoic Acid	150-13- 0	USP	0.0010000000
465 608		Pyridoxine Hydrochloride Pyridoxine Hydrochloride-2	58-56-0	FCC USP	0.0010000000
461 467 833 1501		Folic Acid Thiamine Hydrochloride Vitamin B1 Thiamine hydrochloride-2	59-30-3 67-03-8	USP FCC USP USP	0.0010000000 0.0010000000
463 487 719		Niacinamide Choline Chloride Choline chloride-2 synthetic	98-92-0 67-48-1	USP USP 99.0%	0.0010000000 0.0030000000
462 884		myo-Inositol myo-Inositol-2	87-89-8	FCC EP, FCC, NF	0.0350000000
<b>Total weight of dry components:</b>					<b>12.3927750000 g/L</b>
<b>Liquid Components:</b>					
<b>Part Number</b>	<b>Part Name</b>	<b>CAS#</b>	<b>Grade/Purity</b>	<b>Concentration (mL/L)</b>	
<b>Total volume of liquid components:</b>					<b>0.0000000000</b>



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		<b>mL/L</b>
Preferred Filter Information (Pore Size and Material)		
Retain Information		



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**DRAFT**