

# Biopharmaceutical production chemicals and excipients

From discovery to clinical development and production, trust products from Avantor to help you reach the market faster with new breakthroughs



# Setting science in motion to create a better world







**WE ARE AVANTOR®**

From discovery to delivery, Avantor is a global manufacturer and distributor of high-quality products, services and solutions to professionals in the life sciences and advanced technologies industries. We focus on the things that matter most to you, providing exceptional convenience, collaboration and customization to help ensure your success.

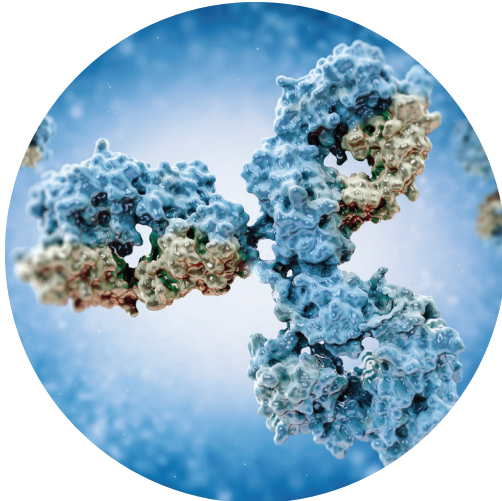
Our channel brand, VWR, part of Avantor, offers an integrated, seamless purchasing experience that is optimized for the way you do business. Through our global e-commerce platform, you can access our own brands as well as those from thousands of other manufacturers, so you can get exactly what you need to support your processes.

**BIOPHARMACEUTICALS:  
ENABLING BREAKTHROUGHS IN BIOLOGICS**

Today's biologics provide breakthrough solutions for many of the world's most challenging diseases and chronic conditions.

As a supplier for the largest biopharmaceutical companies in the world, Avantor is trusted to provide the products, services and solutions needed to quickly move from the small-scale bench, scaling up in the pilot plant, to full production, reaching the market faster with new scientific breakthroughs in medicine.

When you work with Avantor, you gain a strategic partner with customizable manufacturing solutions, high-quality cGMP materials and specialized services. Backed by extensive regulatory and technical process expertise, we play a vital role in helping to increase drug yield, lot-to-lot consistency and, most importantly, drive results that benefit the world.



# Proven brands that enhance your processes



## J.T.BAKER® CHEMISTRIES

Our J.T.Baker® brand is known around the world for unsurpassed reproducibility, consistency and application optimization.

## MACRON FINE CHEMICALS™ PRODUCTS

Macron Fine Chemicals™ products represent consistency and repeatability, adding value across a wide range of applications.

## VWR BIOPROCESSING SOLUTIONS

VWR Bioprocessing Solutions can address all of your needs for upstream applications, as well as downstream purification and final fill requirements.

# Trust Avantor to help you overcome unique bioprocessing challenges

## QUALITY & CHOICE

### PRODUCTION CHEMICALS

Avantor-manufactured and distributed products provide structured choice and risk mitigation

Global cGMP manufacturing capabilities backed by global change notification programs for regulated materials

Lot-to-lot consistency and comprehensive supportive testing from our brands of high-purity direct materials

## EXPERTISE

Field-based specialists to help you select the most appropriate direct materials for your processes

Data-driven answers to your toughest biopharmaceutical challenges—from gene to protein to final formulation

## CONVENIENCE

Global cGDP logistics footprint ensures product integrity and prompt delivery globally  
Special logistics and supply chain services, including

- Product certifications provided electronically and/or with shipments
- Customer-reserved inventory to help enable assurance of supply
- Custom pallet programs and barcoded labeling

Global e-commerce platform enables you to get what you need, when you need it

## CUSTOMIZATION

Custom cGMP manufacturing capabilities for direct materials for BioPharma manufacturing—from small scale to high volume manufacturing

Addressing your custom purity needs, new product development and synthesis from cell culture supplements, elemental impurity controlled buffers, through novel excipients

Wide range of packaging alternatives to fit your process for both powder and liquid materials

# Quality and supply chain security

Avantor's quality programs use a customer-centric approach designed to decrease complexity and fully satisfy the quality, regulatory and security demands you face every day.

Beyond our own operations, we have robust supply chains and security programs with our suppliers. We track and share how we're doing so you may benefit from enhanced regulatory compliance and minimized risk to drive cost-effectiveness and faster time-to-market for products.

- Global network of cGMP and cGDP facilities: Avantor's cGMP facilities offer manufacturing, packaging and subdivision capabilities to meet your needs. Our distribution facilities have been certified and comply with the International Pharmaceutical Excipients Council's (IPEC) guidelines for Good Distribution Practices (cGDP).
- Change notification: customer notification through the Avantor Management of Change and Change Notification Service (CNS) programs help you stay in control of changing situations and minimize risks associated with changes to manufacturing processes.

- Supplier auditing and integrity: we conduct risk-based audits to understand the capabilities of new suppliers and collaborate with suppliers to promptly address corrective and preventive actions (CAPAs), should they arise.
- Collaborative planning, forecasting and replenishment (CPFR): we provide service level reports on assurance of supply through our Critical Materials Care team.
- Documentation: Certificates of Conformance, Quality or Analysis are available with SDS documents on [vwr.com](http://vwr.com) and [avantorinc.com](http://avantorinc.com).



# Change notification programs



## AVANTOR MANAGEMENT OF CHANGE PROGRAM

Change is a constant in today's global manufacturing environment. The Avantor Management of Change (MOC) program puts key information into your hands for J.T.Baker® and Macron Fine Chemicals™ brand products so you can stay in control of changing situations and minimize risks associated with changes to manufacturing processes.

## VWR CHANGE NOTIFICATION SYSTEM

Change notification for VWR Bioprocessing Chemicals is available through the VWR change notification system. The VWR change notification system provides complete, consistent, reliable, and transparent access to change notification for these materials. A secure web platform allows you to see new change notices, as well as a history of past changes.

### AVANTOR MANAGEMENT OF CHANGE (MOC) PROGRAM: NOTIFICATION CATEGORIES

	HR	R	RL	NI	N
<b>MOC Category</b>	Highly Regulated	Regulated	Regulated Limited	Non-Regulated with Information	Non-Regulated
<b>Bulk Pharmaceutical</b>	Yes	Yes	Regional Markets	No	No
<b>Intended/Potential Use</b>	API, BPE	BPE	Processing Aids, Food, Nutraceuticals, Cosmetics, Bulk Pharmaceutical Chemicals	Reagents	Reagents
<b>Grades</b>	USP, NF, EP, BP, JP	USP, NF, EP, BP, JP	IP, EP, FCC*	ACS, Reagents	ACS, Reagents
<b>Notification of Change</b>	Yes, level 2	Yes, level 2	Yes, level 2	Limited if registered in MOC database	Non-regulated
<b>Industry Reference</b>	IPEC, Q7	IPEC, Q7	FCC, ID, EU	None	None
<b>Regulating Body</b>	FDA, cGMP	FDA, cGMP	IFPA, EU, Food GMP	None	None

# Table of contents

## 01

### BIOPHARMACEUTICAL PRODUCTS

Fermentation and cell culture	9
Harvest	11
Purification	12
Formulation and fill & finish	14

## 02

### EXCIPIENTS

Liquid dosage form excipients	16
Parenteral dosage form	18
Semi-solid dosage form	21
Solid dosage form	24
Soft gelatin capsule dosage form	26



# Biopharmaceutical products





# Avantor® biopharmaceutical products for fermentation and cell culture

Product	Brand	Grade	cGMP	Endotoxin Tested	Cat. No.	Sizes*	
<b>Acids</b>							
Citric Acid, Anhydrous	VWR Bioprocess Chemicals	USP, EP, BP, JP	Yes	Yes	VWRB805	2.5KG	12 KG
Citric Acid Monohydrate	VWR Bioprocess Chemicals	USP, EP, BP, JP	Yes	Yes	VWRB908	500g	50kg
<b>Amino Acids</b>							
N-Acetyl-L-Arginine	J.T.Baker®	Technical	No	Yes	JT2097 <sup>1</sup>	100 g	25 kg
L-Arginine	J.T.Baker®	Multi-Compendial	Yes	Yes	JT2066	1 kg	50 kg
L-Arginine	Macron Fine Chemicals®	Multi-Compendial	Yes	Yes	MK4932	1 kg	50 kg
L-Arginine Hydrochloride	J.T.Baker®	Multi-Compendial	Yes	Yes	JT2067	1 kg	50 kg
L-Arginine Hydrochloride	Macron Fine Chemicals®	Multi-Compendial	Yes	Yes	MK4930	1 kg	50 kg
L-Asparagine Monohydrate	J.T.Baker®	FCC	No	Yes	JT2068	1 kg	12 kg
L-Cysteine Hydrochloride Monohydrate	J.T.Baker®	Multi-Compendial	Yes	Yes	JT2071	100 g	1 kg
L-Cystine	J.T.Baker®	Multi-Compendial	Yes	Yes	JT2073	1 kg	—
L-Glutamic Acid	J.T.Baker®	Multi-Compendial	Yes	Yes	JT2077	1 kg	—
L-Glutamine	J.T.Baker®	USP-FCC	Yes	Yes	JT2078	1 kg	50 kg
Glycine	J.T.Baker®	USP-FCC	Yes	No	JT0581	500 g	12 kg
L-Histidine	J.T.Baker®	Multi-Compendial	Yes	Yes	JT2080	100 g	12 kg
L-Histidine	Macron Fine Chemicals®	Multi-Compendial	Yes	Yes	MK4935	1 kg	50 kg
L-Histidine Monohydrochloride	J.T.Baker®	Multi-Compendial	Yes	Yes	JT2081	1 kg	50 kg
L-Histidine Monohydrochloride	Macron Fine Chemicals®	Multi-Compendial	Yes	Yes	MK4942	1 kg	50 kg
L-Isoleucine	J.T.Baker®	Multi-Compendial	Yes	Yes	JT2082	100 g	12 kg
L-Leucine	J.T.Baker®	Multi-Compendial	Yes	Yes	JT2083	1 kg	12 kg
L-Lysine Hydrochloride	J.T.Baker®	Multi-Compendial	Yes	Yes	JT2084	1 kg	50 kg
L-Methionine	J.T.Baker®	Multi-Compendial	Yes	Yes	JT2085	100 g	12 kg
L-Phenylalanine	J.T.Baker®	Multi-Compendial	Yes	Yes	JT2086	1 kg	12 kg
L-Proline	J.T.Baker®	Multi-Compendial	Yes	Yes	JT2087	1 kg	—
L-Proline	J.T.Baker®	Multi-Compendial	Yes	Yes	JT2096	50 kg	—
L-Serine	J.T.Baker®	Multi-Compendial	Yes	Yes	JT2088	1 kg	12 kg
L-Threonine	J.T.Baker®	Multi-Compendial	Yes	Yes	JT2089	1 kg	12 kg
L-Tryptophan	J.T.Baker®	Multi-Compendial	Yes	Yes	JT2092	1 kg	12 kg
L-Tyrosine	J.T.Baker®	Multi-Compendial	Yes	Yes	JT2093	1 kg	—
L-Tyrosine Disodium Salt Dihydrate	J.T.Baker®	BAKER ANALYZED™ Reagent	No	Yes	JT2094	100 g	12 kg
L-Valine	J.T.Baker®	Multi-Compendial	Yes	Yes	JT2095	100 g	12 kg
L-Valine	Macron Fine Chemicals®	Multi-Compendial	Yes	Yes	MK4936	1 kg	50 kg
<b>Amino Acid Derivatives</b>							
Asparagine, Anhydrous	VWR Bioprocess Chemicals	Bioreagent	No	Yes	VWRB15005	1kg	25kg
L-Cystine Dihydrochloride	VWR Bioprocess Chemicals	Bioreagent	No	Yes	VWRB21502	1kg	25kg
Hypoxanthine Disodium Salt	VWR Bioprocess Chemicals	Bioreagent	No	Yes	VWRB31608	1kg	25kg
Hypoxanthine Sodium Salt	VWR Bioprocess Chemicals	Bioreagent	No	Yes	VWRB31752	1kg	25kg
L-Lysine, Anhydrous	VWR Bioprocess Chemicals	Bioreagent	No	Yes	VWRB42307	1kg	25kg
L-Tyrosine Disodium Dihydrate	VWR Bioprocess Chemicals	Bioreagent	No	Yes	VWRB87058	1kg	25kg
<b>Biological Buffers</b>							
HEPES Free Acid	VWR Bioprocess Chemicals	Bioreagent	No	Yes	VWRB30487	1kg	25kg
HEPES Sodium Salt	VWR Bioprocess Chemicals	Bioreagent	No	Yes	VWRB30567	1kg	25kg
PIPES Disodium Salt	VWR Bioprocess Chemicals	Bioreagent	No	Yes	VWRB73305	1kg	25kg
PIPES Free Acid	VWR Bioprocess Chemicals	Bioreagent	No	Yes	VWRB73007	1kg	25kg
PIPES Sequisodium Salt	VWR Bioprocess Chemicals	Bioreagent	No	Yes	VWRB73257	1kg	25kg
<b>Carbohydrates</b>							
Dextrose, Anhydrous	VWR Bioprocess Chemicals	USP, EP, BP, JP	Yes	Yes	VWRBK876	1kg	200lb
D-Galactose	VWR Bioprocess Chemicals	NF, EP	Yes	Yes	VWRB3441	1kg	12kg
Sucrose	VWR Bioprocess Chemicals	NF, BP, JP	Yes	Yes	VWRB335	100g	50kg
D-Trehalose Dihydrate	VWR Bioprocess Chemicals	NF, EP	Yes	Yes	VWRB3599	1kg	12kg
<b>Minerals and Nutrients</b>							
Magnesium Sulfate, Anhydrous	Macron Fine Chemicals®	USP	Yes	No	MK5053	10 kg	200 lb
Magnesium Sulfate Heptahydrate	Macron Fine Chemicals®	GenAR	Yes	No	MK5691	100 lb	—
Potassium Iodide	Macron Fine Chemicals®	GenAR	Yes	No	MK1115	500 g	50 kg
Pyridoxine Hydrochloride	J.T.Baker®	USP-FCC	Yes	No	JT3343	5 g	100 g
Sodium Chloride	J.T.Baker®	Multi-Compendial	Yes	Yes	JT3627	500 g	350 lb
Sodium Chloride	J.T.Baker®	Multi-Compendial	Yes	No	JT3301	500 g	50 kg
Sodium Phosphate Monobasic Monohydrate	J.T.Baker®	USP-FCC	Yes	No	JT3820	500 g	100 lb
Sodium Phosphate Dibasic, Anhydrous	J.T.Baker®	USP-FCC	Yes	No	JT3827	500 g	12 kg
Sodium Phosphate Dibasic Dodecylhydrate	J.T.Baker®	BAKER ANALYZED™ Reagent	No	No	JT3822	500 g	12kg

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# BIOPHARMACEUTICAL PRODUCTS

Continued from previous page

Product	Brand	Grade	cGMP	Endotoxin Tested	Cat. No.	Sizes*	
Sodium Phosphate Dibasic Heptahydrate	J.T.Baker®	Multi-Compendial	Yes	Yes	JT3803	500 g	200 lb
Sodium Phosphate Tribasic Dodecyhydrate	J.T.Baker®	BAKER ANALYZED™ ACS Reagent	No	No	JT3836	500 g	12kg
Zinc Sulfate	Macron Fine Chemicals®	USP-FCC	Yes	No	MK8872	2.5 kg	100 lb
<b>pH Adjusters (Acid)</b>							
Acetic Acid, Glacial	J.T.Baker®	Multi-Compendial	Yes	No	JT9526	500 mL	450 lb
Citric Acid, Anhydrous	J.T.Baker®	Multi-Compendial	Yes	No	JT0127	2.5 kg	12 kg
Citric Acid Monohydrate	J.T.Baker®	Multi-Compendial	Yes	No	JT0115	500 g	50 kg
Hydrochloric Acid, 36.5–38.0%	Macron Fine Chemicals®	NF-FCC-ACS	Yes	No	MK2612	500 mL	500 lb
Hydrochloric Acid, 6.0N WFI	J.T.Baker®	Biotech Reagent	Yes	No	JT*0347	1 L	—
Nitric Acid	J.T.Baker®	NF	Yes	No	JT9607	2.5 L	—
Phosphoric Acid	J.T.Baker®	NF-FCC	Yes	No	JT0262	4 L	200 lb
Sulfuric Acid	J.T.Baker®	Multi-Compendial	Yes	No	JT9671	500 mL	400 lb
<b>pH Adjusters (Base)</b>							
Ammonia Solution, Strong	J.T.Baker®	Multi-Compendial	Yes	No	JT9736	2.5 L	360 lb
Ammonium Hydroxide, 28.0–30.0%	J.T.Baker®	BAKER ANALYZED™ ACS Reagent	No	No	JT9721	500 mL	4 L
Potassium Hydroxide 45% Solution	J.T.Baker®	BAKER ANALYZED™ Reagent	No	No	JT3143	500 mL	19 L
Sodium Bicarbonate	J.T.Baker®	Multi-Compendial	Yes	Yes	JT3510	2.5 kg	100 lb
Sodium Carbonate, Anhydrous	J.T.Baker®	NF-FCC	Yes	No	JT3605	500 g	100 lb
Sodium Carbonate Monohydrate	J.T.Baker®	Multi-Compendial	Yes	Yes	3603	12 kg	100 lb
Sodium Hydroxide, Pellets	J.T.Baker®	NF-FCC	Yes	No	JT3728	12 kg	220 lb
Sodium Hydroxide, 1.0N WFI	J.T.Baker®	Biotech Reagent	Yes	Yes	JT*0388	19 L	200 L
Sodium Hydroxide, 2.0N WFI	J.T.Baker®	Biotech Reagent	Yes	Yes	JT0389	19 L	—
Sodium Hydroxide, 5.0N WFI	J.T.Baker®	Biotech Reagent	Yes	Yes	JT0895	19 L	—
Sodium Hydroxide, 10N WFI	J.T.Baker®	Biotech Reagent	Yes	Yes	JT0312	1 L	19 L
Sodium Hydroxide, 25% Solution	J.T.Baker®	Biotech Reagent	Yes	Yes	JT2613	2.5 L	16,000 L
Sodium Hydroxide, 25% Solution	J.T.Baker®	Biotech Reagent	Yes	Yes	JT0338	19 L	200 L
Sodium Hydroxide, 50% Solution	J.T.Baker®	Biotech Reagent	Yes	No	JT0339	4L	1135 L
Sodium Hydroxide, 50% WFI	J.T.Baker®	Biotech Reagent	Yes	Yes	JT0897	19 L	998 L
<b>Protein Expression Inducing Agents</b>							
IPTG	Macron Fine Chemicals®	GenAR	No	No	MKV263	1 g	1 kg
IPTG	J.T.Baker®	Biotech Reagent	Yes	Yes	JTV264	10 g	1 kg
<b>Salts</b>							
Calcium Chloride Dihydrate	VWR Bioprocess Chemicals	USP, EP, BP, JP	Yes	Yes	VWRB556	1kg	12kg
Potassium Chloride	VWR Bioprocess Chemicals	USP, EP, BP, JP	Yes	Yes	VWRB395	500g	50kg
Potassium Phosphate Monobasic, Anhydrous	VWR Bioprocess Chemicals	NF, EP, BP	Yes	Yes	VWRB0781	1kg	12kg
Sodium Carbonate, Anhydrous	VWR Bioprocess Chemicals	NF, EP, BP, JP	Yes	Yes	VWRB585	2.5kg	12kg
Sodium Carbonate Monohydrate	VWR Bioprocess Chemicals	NF, EP, BP	Yes	Yes	VWRB427	2.5kg	12kg
Sodium Chloride	VWR Bioprocess Chemicals	USP, EP, BP, JP	Yes	Yes	VWRB241	1kg	350lb
Sodium Citrate Dihydrate	VWR Bioprocess Chemicals	USP, BP, JP	Yes	Yes	VWRB101	500g	100lb
Sodium Hydroxide Pellets	VWR Bioprocess Chemicals	NF, EP, BP, JP	No	Yes	VWRB583	1kg	12kg
Sodium Phosphate Dibasic, Anhydrous	VWR Bioprocess Chemicals	USP, EP	Yes	Yes	VWRB0404	1kg	12kg
Sodium Phosphate Dibasic Dihydrate	VWR Bioprocess Chemicals	USP, BP, EP	Yes	Yes	VWRB709	1kg	12kg
Sodium Phosphate Dibasic Heptahydrate	VWR Bioprocess Chemicals	ACS, USP	Yes	Yes	VWRB0348	1kg	12kg
Sodium Phosphate Monobasic Monohydrate	VWR Bioprocess Chemicals	ACS, USP, BP	Yes	Yes	VWRB0823	1kg	12kg
Sodium Sulfate, Anhydrous	VWR Bioprocess Chemicals	USP, EP	Yes	Yes	VWRB836	500g	100kg
<b>Sugars</b>							
Dextrose, Anhydrous	J.T.Baker®	Multi-Compendial	Yes	Yes	JT1920	2.5 kg	200 lb
Dextrose Monohydrate	J.T.Baker®	Multi-Compendial	Yes	Yes	JT1913	5 kg	12 kg
Galactose	J.T.Baker®	Multi-Compendial	Yes	Yes	JT6322	1 kg	12 kg
Lactose Monohydrate	J.T.Baker®	Multi-Compendial	Yes	Yes	JT2250	2.5 kg	12 kg
Mannitol, Powder	J.T.Baker®	Multi-Compendial	Yes	Yes	JT2553	500 g	50 kg
Sorbitol	J.T.Baker®	Multi-Compendial	Yes	Yes	JT3449	5 kg	50 kg
Sucrose, Beet Derived	J.T.Baker®	Multi-Compendial	Yes	Yes	JT6321	1 kg	12 kg
Sucrose, Cane Derived	J.T.Baker®	Multi-Compendial	Yes	Yes	JT6320	1 kg	12 kg
Sucrose, Crystal	J.T.Baker®	Multi-Compendial	Yes	Yes	JT4074	500 g	90 kg
Sucrose, Crystal	J.T.Baker®	BAKER ANALYZED™ ACS Reagent	No	No	JT4072	500 g	100 lb
Trehalose	J.T.Baker®	Multi-Compendial	Yes	Yes	JT6324	1 kg	12 kg

\*Note: products shown may not be readily available in all regions without prior arrangement. Contact your Avantor account manager to confirm availability.

\*Additional sizes may be available. For the latest product information or more details, contact your Avantor account manager.

# Avantor® biopharmaceutical products for use in harvest processing steps

Product	Brand	Grade	cGMP	Endotoxin Tested	Cat. No.	Sizes*	
<b>Acids</b>							
Citric Acid, Anhydrous	VWR Bioprocess Chemicals	USP, EP, BP, JP	Yes	Yes	VWRB805	2.5KG	12 KG
Citric Acid Monohydrate	VWR Bioprocess Chemicals	USP, EP, BP, JP	Yes	Yes	VWRB908	500g	50kg
<b>Chaotic Agents</b>							
Urea	VWR Bioprocess Chemicals	USP, EP, BP, JP	Yes	Yes	VWRB568	500g	50kg
<b>Denaturants</b>							
Guanidine Hydrochloride	J.T.Baker®	Biotech Reagent	No	No	JT4077	12kg	—
Guanidine Hydrochloride	Macron Fine Chemicals®	GenAR	No	No	MK7716	500 g	12 kg
Guanidine Hydrochloride, XTL	Macron Fine Chemicals®	GenAR	Yes	No	MK0507	5 kg	50 kg
Guanidine Hydrochloride, 6M Solution	Macron Fine Chemicals®	GenAR	Yes	No	MK0563	4 L	200 L
Guanidine Thiocyanate	J.T.Baker®	Biotech Reagent	No	No	JT4083	500 g	12 kg
Urea	J.T.Baker®	Multi-Compendial	Yes	No	JT4203	12 kg	50 kg
Urea	J.T.Baker®	USP	Yes	No	JT4206	500 g	50 kg
Urea	J.T.Baker®	USP	Yes	Yes	JT4208	50 kg	—
<b>Disulfide Reducing Agents</b>							
DTT	J.T.Baker®	Biotech Reagent	Yes	No	JTF781	1 kg	—
<b>pH Adjusters (Acid)</b>							
Acetic Acid, Glacial	J.T.Baker®	Multi-Compendial	Yes	No	JT9526	500 mL	450 lb
Citric Acid, Anhydrous	J.T.Baker®	Multi-Compendial	Yes	No	JT0127	2.5 kg	12 kg
Citric Acid Monohydrate	J.T.Baker®	Multi-Compendial	Yes	No	JT0115	500 g	50 kg
Hydrochloric Acid, 36.5–38.0%	Macron Fine Chemicals®	NF-FCC-ACS	Yes	No	MK2612	500 mL	500 lb
Nitric Acid	J.T.Baker®	NF	Yes	No	JT9607	2.5 L	—
Phosphoric Acid	J.T.Baker®	NF-FCC	Yes	No	JT0262	4 L	200 lb
Sulfuric Acid	J.T.Baker®	Multi-Compendial	Yes	No	JT9671	500 mL	4050 lb
<b>pH Adjusters (Base)</b>							
Ammonia Solution, Strong	J.T.Baker®	Multi-Compendial	Yes	No	JT9736	2.5 L	360 lb
Ammonium Hydroxide, 28.0–30.0%	J.T.Baker®	BAKER ANALYZED™ ACS Reagent	No	No	JT9721	500 mL	4 L
Potassium Hydroxide, 45% Solution	J.T.Baker®	BAKER ANALYZED™ Reagent	No	No	JT3143	500 mL	19 L
Sodium Bicarbonate	J.T.Baker®	Multi-Compendial	Yes	Yes	JT3510	2.5 kg	100 lb
Sodium Carbonate, Anhydrous	J.T.Baker®	NF-FCC	Yes	No	JT3605	500 g	100 lb
Sodium Carbonate Monohydrate	J.T.Baker®	Multi-Compendial	Yes	Yes	JT3603	12 kg	100 lb
Sodium Hydroxide, 10N WFI	J.T.Baker®	Biotech Reagent	Yes	Yes	JT0389	19 L	200 L
Sodium Hydroxide, 2.0N WFI	J.T.Baker®	Biotech Reagent	Yes	Yes	JT0390	19 L	—
Sodium Hydroxide, 5.0N WFI	J.T.Baker®	Biotech Reagent	Yes	Yes	JT0895	19 L	—
Sodium Hydroxide, 10N WFI	J.T.Baker®	Biotech Reagent	Yes	Yes	JT0312	1 L	19 L
Sodium Hydroxide, 25% Solution	J.T.Baker®	Biotech Reagent	Yes	Yes	JT0338	19 L	200 L
Sodium Hydroxide, 25% Solution	J.T.Baker®	Biotech Reagent	Yes	Yes	JT2613†	2.5 L	16,000 L
Sodium Hydroxide, 50% Solution	J.T.Baker®	Biotech Reagent	Yes	No	JT0339	4L	1135 L
Sodium Hydroxide, 50% WFI	J.T.Baker®	Biotech Reagent	Yes	Yes	JT0897	19 L	998 L
Sodium Hydroxide, Pellets	J.T.Baker®	NF-FCC	Yes	No	JT3728	12 kg	220 lb
<b>Salts</b>							
Ammonium Sulfate	VWR Bioprocess Chemicals	ACS, NF	Yes	Yes	VWRB191	500g	100kg
Ammonium Sulfate	J.T.Baker®	FCC-ACS	No	No	JT0795	25 kg	325 lb
Ammonium Sulfate	J.T.Baker®	NF	Yes	Yes	JT0798	500 g	100 kg
Calcium Chloride Dihydrate	VWR Bioprocess Chemicals	USP, EP, BP, JP	Yes	Yes	VWRB556	1kg	12kg
Edetate Disodium	J.T.Baker®	Multi-Compendial	Yes	Yes	JT8995	12 kg	100 lb
Guanidine Chloride	VWR Bioprocess Chemicals	Bioreagent	No	Yes	VWRB287	5kg	50kg
Potassium Chloride	VWR Bioprocess Chemicals	USP, EP, BP, JP	Yes	Yes	VWRB395	500g	50kg
Potassium Phosphate Dibasic	J.T.Baker®	Multi-Compendial	Yes	Yes	JT3250	500 g	100 kg
Potassium Phosphate Monobasic, Anhydrous	VWR Bioprocess Chemicals	NF, EP, BP	Yes	Yes	VWRB0781	1kg	12kg
Potassium Phosphate Monobasic	J.T.Baker®	Multi-Compendial	Yes	Yes	JT3248	500 g	12 kg
Sodium Acetate, Anhydrous	VWR Bioprocess Chemicals	USP	Yes	Yes	VWRB602	2.5kg	12kg
Sodium Acetate, Anhydrous	J.T.Baker®	USP-FCC	Yes	No	JT3473	2.5 kg	200 lb
Sodium Acetate Trihydrate	VWR Bioprocess Chemicals	USP, BP	Yes	Yes	VWRB530	500g	12kg
Sodium Acetate Trihydrate	J.T.Baker®	Multi-Compendial	Yes	Yes	JT3461	500 g	275 lb
Sodium Chloride	J.T.Baker®	Multi-Compendial	Yes	Yes	JT3627	500 g	350 lb
Sodium Chloride	J.T.Baker®	Multi-Compendial	Yes	No	JT3301	500 g	50 kg
Sodium Chloride	VWR Bioprocess Chemicals	USP, EP, BP, JP	Yes	Yes	VWRB241	1kg	350lb
Sodium Citrate Dihydrate	VWR Bioprocess Chemicals	USP, BP, JP	Yes	Yes	VWRB101	500g	100lb
Sodium Citrate Dihydrate	J.T.Baker®	Multi-Compendial	Yes	Yes	JT3647	500 g	100 lb
Sodium Hydroxide, Pellets	VWR Bioprocess Chemicals	NF, EP, BP, JP	No	Yes	VWRB583	1kg	12kg

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# BIOPHARMACEUTICAL PRODUCTS

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Product	Brand	Grade	cGMP	Endotoxin Tested	Cat. No.	Sizes*
Sodium Phosphate Dibasic, Anhydrous	VWR Bioprocess Chemicals	USP, EP	Yes	Yes	VWRB0404	1kg 12kg
Sodium Phosphate Dibasic, Anhydrous	J.T.Baker®	USP-FCC	Yes	No	JT3827	500 g 12 kg
Sodium Phosphate Dibasic Dihydrate	VWR Bioprocess Chemicals	USP, BP, EP	Yes	Yes	VWRB709	1kg 12kg
Sodium Phosphate Dibasic Dodecylhydrate	J.T.Baker®	BAKER ANALYZED™ Reagent	No	No	JT3822	500 g 12kg
Sodium Phosphate Dibasic Heptahydrate	VWR Bioprocess Chemicals	ACS, USP	Yes	Yes	VWRB0348	1kg 12kg
Sodium Phosphate Dibasic Heptahydrate	J.T.Baker®	Multi-Compendial	Yes	Yes	JT3803	500 g 200 lb
Sodium Phosphate Monobasic Monohydrate	VWR Bioprocess Chemicals	ACS, USP, BP	Yes	Yes	VWRB0823	1kg 12kg
Sodium Phosphate Monobasic Monohydrate	J.T.Baker®	USP-FCC	Yes	No	JT3820	500 g 100 lb

\*Note: products shown may not be readily available in all regions without prior arrangement. Contact your Avantor account manager to confirm availability.

\*Additional sizes may be available. For the latest product information or more details, contact your Avantor account manager.

## Avantor® biopharmaceutical products for use in purification processing steps

Product	Brand	Grade	cGMP	Endotoxin Tested	Cat. No.	Sizes*
<b>Acids</b>						
Citric Acid, Anhydrous	VWR Bioprocess Chemicals	USP, EP, BP, JP	Yes	Yes	VWRB805	2.5KG 12 KG
Citric Acid Monohydrate	VWR Bioprocess Chemicals	USP, EP, BP, JP	Yes	Yes	VWRB908	500g 50kg
<b>Biobuffers &amp; TRIS</b>						
HEPES, Free Acid	J.T.Baker®	Ultrapure Bioreagent	No	No	JT4808	5 kg 25 kg
HEPES, Free Acid	VWR Bioprocess Chemicals	Bioreagent	No	Yes	VWRB30487	1kg 25kg
HEPES Sodium Salt	VWR Bioprocess Chemicals	Bioreagent	No	Yes	VWRB30567	1kg 25kg
HEPES Sodium Salt	J.T.Baker®	Ultrapure Bioreagent	No	No	JT4809	5 kg 10 kg
MES	J.T.Baker®	Purified	No	No	JT4220†	10 kg 25 kg
MES Monohydrate, Free Acid	J.T.Baker®	Ultrapure Bioreagent	No	No	JT4812	5 kg 25 kg
MES Sodium Salt	J.T.Baker®	Ultrapure Bioreagent	No	No	JT4813	500 g 10 kg
MOPS, Purified	J.T.Baker®	Ultrapure Bioreagent	No	No	JT4810	1 kg 50 kg
TRIS Hydrochloride	J.T.Baker®	Ultrapure Bioreagent	No	No	JT4103	250 gr 50 kg
TRIS Hydrochloride	J.T.Baker®	Ultrapure Bioreagent	Yes	No	JT4108	12 kg —
TRIS Hydrochloride	J.T.Baker®	Biotech Reagent	Yes	Yes	JT4106	500 g 50 kg
TRIS Hydrochloride	VWR Bioprocess Chemicals	Bioreagent	No	Yes	VWRB85827	1kg 25kg
Tromethamine (TRIS Base)	J.T.Baker®	Ultrapure Bioreagent	No	No	JT4109	500 g 50 kg
Tromethamine (TRIS Base)	J.T.Baker®	Multi-Compendial	Yes	Yes	JT4102	500 g 50 kg
Tromethamine	VWR Bioprocess Chemicals	USP, EP, BP, JPC	Yes	Yes	VWRB497	500g 50kg
<b>Chromatography Media Sugars</b>						
PolyPEI	J.T.Baker®	Spherical Polymethacrylate	IEX	No	JT7585	35 µm 500 Å
PolyABX	J.T.Baker®	Spherical Polymethacrylate	IEX	No	JT7586	35 µm 500 Å
PolyCSX	J.T.Baker®	Spherical Polymethacrylate	IEX	No	JT7587	35 µm 500 Å
PolyQUAT	J.T.Baker®	Spherical Polymethacrylate	IEX	No	JT7603	35 µm 500 Å
PolyHi-Propyl	J.T.Baker®	Spherical Polymethacrylate	HIC	No	JT7588	35 µm 500 Å
<b>Cleaning Reagents</b>						
Guanidine Hydrochloride, XTL	Macron Fine Chemicals®	GenAR	Yes	No	MK0507	5 kg 50 kg
Guanidine Hydrochloride, 6M Solution	Macron Fine Chemicals®	GenAR	Yes	No	MK0563	4 L 200 L
Guanidine Thiocyanate	J.T.Baker®	Biotech Reagent	No	No	JT4083	500 g 12 kg
Urea	J.T.Baker®	Multi-Compendial	Yes	No	JT4203	12 kg 50 kg
<b>pH Adjusters (Acid)</b>						
Acetic Acid, Glacial	J.T.Baker®	Multi-Compendial	Yes	No	JT9526	500 mL 450 lb
Citric Acid, Anhydrous	J.T.Baker®	Multi-Compendial	Yes	No	JT0127	2.5 kg 12 kg
Citric Acid Monohydrate	J.T.Baker®	Multi-Compendial	Yes	No	JT0115	500 g 50 kg
Hydrochloric Acid, 36.5–38.0%	Macron Fine Chemicals®	NF-FCC-ACS	Yes	No	MK2612	500 mL 500 lb
Nitric Acid	J.T.Baker®	NF	Yes	No	JT9607	2.5 L —
Phosphoric Acid	J.T.Baker®	NF-FCC	Yes	No	JT0262	4 L 200 lb
Sulfuric Acid	J.T.Baker®	Multi-Compendial	Yes	No	JT9671	500 mL 4050lb
<b>pH Adjusters (Base)</b>						
Ammonia Solution, Strong	J.T.Baker®	Multi-Compendial	Yes	No	JT9736	2.5 L 360 lb
Ammonium Hydroxide, 28.0–30.0%	J.T.Baker®	BAKER ANALYZED™ ACS Reagent	No	No	JT9721	500 mL 4 L

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Product	Brand	Grade	cGMP	Endotoxin Tested	Cat. No.	Sizes*
Potassium Hydroxide, 45% Solution	J.T.Baker®	BAKER ANALYZED™ Reagent	No	No	JT3143	500 mL 19 L
Sodium Bicarbonate	J.T.Baker®	Multi-Compendial	Yes	Yes	JT3510	2.5 kg 100 lb
Sodium Carbonate, Anhydrous	J.T.Baker®	NF-FCC	Yes	No	JT3605	500 g 100 lb
Sodium Carbonate Monohydrate	J.T.Baker®	Multi-Compendial	Yes	Yes	JT3603	12 kg 100 lb
Sodium Hydroxide, 1.0N WFI	J.T.Baker®	Biotech Reagent	Yes	Yes	JT0388	19 L 200 L
Sodium Hydroxide, 2.0N WFI	J.T.Baker®	Biotech Reagent	Yes	Yes	JT0389	19 L —
Sodium Hydroxide, 5.0N WFI	J.T.Baker®	Biotech Reagent	Yes	Yes	JT0895	19 L —
Sodium Hydroxide, 10N WFI	J.T.Baker®	Biotech Reagent	Yes	Yes	JT0312	1 L 19 L
Sodium Hydroxide, 25% Solution	J.T.Baker®	Biotech Reagent	Yes	Yes	JT0338	19 L 200 L
Sodium Hydroxide, 25% Solution	J.T.Baker®	Biotech Reagent	Yes	Yes	JT2613	2.5 L 16000 L
Sodium Hydroxide, 50% Solution	J.T.Baker®	Biotech Reagent	Yes	No	JT0339	4L 1135 L
Sodium Hydroxide, 50% WFI	J.T.Baker®	Biotech Reagent	Yes	Yes	JT0897	19 L 998 L
Sodium Hydroxide, Pellets	J.T.Baker®	NF-FCC	Yes	No	JT3728	12 kg 220 lb
<b>Salts</b>						
Ammonium Sulfate	J.T.Baker®	NF	Yes	Yes	JT0798	500 g 100 kg
Calcium Chloride Dihydrate	VWR Bioprocess Chemicals	USP, EP, BP, JP	Yes	Yes	VWRB556	1kg 12kg
EDTA Disodium	J.T.Baker®	Multi-Compendial	Yes	Yes	JT8995	12 kg 100 lb
Potassium Chloride	VWR Bioprocess Chemicals	USP, EP, BP, JP	Yes	Yes	VWRB395	500g 50kg
Potassium Phosphate Monobasic, Anhydrous	VWR Bioprocess Chemicals	NF, EP, BP	Yes	Yes	VWRB0781	1kg 12kg
Potassium Phosphate Dibasic	J.T.Baker®	Multi-Compendial	Yes	Yes	JT3250	500 g 100 kg
Potassium Phosphate Monobasic	J.T.Baker®	Multi-Compendial	Yes	Yes	JT3248	500 g 12 kg
Sodium Acetate, Anhydrous	VWR Bioprocess Chemicals	USP	Yes	Yes	VWRB602	2.5kg 12kg
Sodium Acetate, Anhydrous	J.T.Baker®	USP-FCC	Yes	No	JT3473	2.5 kg 200 lb
Sodium Acetate Trihydrate	VWR Bioprocess Chemicals	USP, BP	Yes	Yes	VWRB530	500g 12kg
Sodium Acetate Trihydrate	J.T.Baker®	Multi-Compendial	Yes	Yes	JT3461	500 g 275 lb
Sodium Carbonate, Anhydrous	VWR Bioprocess Chemicals	NF, EP, BP, JP	Yes	Yes	VWRB585	2.5kg 12kg
Sodium Carbonate Monhydrate	VWR Bioprocess Chemicals	NF, EP, BP	Yes	Yes	VWRB427	2.5kg 12kg
Sodium Chloride	J.T.Baker®	Multi-Compendial	Yes	Yes	JT3627	500 g 350 lb
Sodium Chloride	J.T.Baker®	Multi-Compendial	Yes	No	JT3301	500 g 50 kg
Sodium Chloride	VWR Bioprocess Chemicals	USP, EP, BP, JP	Yes	Yes	VWRB241	1kg 350lb
Sodium Citrate Dihydrate	VWR Bioprocess Chemicals	USP, BP, JP	Yes	Yes	VWRB101	500g 100lb
Sodium Citrate Dihydrate	J.T.Baker®	Multi-Compendial	Yes	Yes	JT3647	500 g 100 lb
Sodium Hydroxide, Pellets	VWR Bioprocess Chemicals	NF, EP, BP, JP	No	Yes	VWRB583	1kg 12kg
Sodium Phosphate Dibasic, Anhydrous	VWR Bioprocess Chemicals	USP, EP	Yes	Yes	VWRB0404	1kg 12kg
Sodium Phosphate Dibasic Dihydrate	VWR Bioprocess Chemicals	USP, BP, EP	Yes	Yes	VWRB709	1kg 12kg
Sodium Phosphate Dibasic, Anhydrous	J.T.Baker®	USP-FCC	Yes	No	JT3827	500 g 12 kg
Sodium Phosphate, Dibasic Dodecylhydrate	J.T.Baker®	BAKER ANALYZED™ Reagent	No	No	JT3822	500 g 12kg
Sodium Phosphate Dibasic Heptahydrate	VWR Bioprocess Chemicals	ACS, USP	Yes	Yes	VWRB0348	1kg 12kg
Sodium Phosphate Dibasic Heptahydrate	J.T.Baker®	Multi-Compendial	Yes	Yes	JT3803	500 g 200 lb
Sodium Phosphate Monobasic Monohydrate	VWR Bioprocess Chemicals	ACS, USP, BP	Yes	Yes	VWRB0823	1kg 12kg
Sodium Phosphate Monobasic Monohydrate	J.T.Baker®	USP-FCC	Yes	No	JT3820	500 g 100 lb
Sodium Phosphate Tribasic Dodecylhydrate	J.T.Baker®	BAKER ANALYZED™ ACS Reagent	No	No	JT3836	500 g 12 kg

## Avantor® biopharmaceutical products for use in formulation, fill & finish processing steps

Product	Brand	Grade	cGMP	Endotoxin Tested	Cat. No.	Sizes*	
<b>Acids</b>							
L-Tartaric Acid	VWR Bioprocess Chemicals	NF, EP, BP, JP	Yes	Yes	VWRB501	500g	50kg
<b>Amino Acid Derivatives</b>							
Asparagine, Anhydrous	VWR Bioprocess Chemicals	Bioreagent	No	Yes	VWRB15005	1kg	25kg
L-Cystine Dihydrochloride	VWR Bioprocess Chemicals	Bioreagent	No	Yes	VWRB21502	1kg	25kg
L-Lysine, Anhydrous	VWR Bioprocess Chemicals	Bioreagent	No	Yes	VWRB42307	1kg	25kg
<b>Carbohydrates</b>							
Dextrose, Anhydrous	VWR Bioprocess Chemicals	USP, EP, BP, JP	Yes	Yes	VWRBK876	1kg	200lb
D-Galactose	VWR Bioprocess Chemicals	NF, EP	Yes	Yes	VWRB3441	1kg	12kg
Sucrose	VWR Bioprocess Chemicals	NF, BP, JP	Yes	Yes	VWRB335	100g	50kg
D-Trehalose Dihydrate	VWR Bioprocess Chemicals	NF, EP	Yes	Yes	VWRB3599	1kg	12kg
<b>CIP/SIP</b>							
Citric Acid, 50%	J.T.Baker®	Biotech Reagent	No	Yes	JT0341	19 L	1,170 L
Hydrochloric Acid, 0.5N	J.T.Baker®	Biotech Reagent	No	Yes	JT0335	19 L	—
Hydrochloric Acid, 1.0N	J.T.Baker®	Biotech Reagent	No	Yes	JT0325	19 L	200 L
Hydrochloric Acid, 2.0N	J.T.Baker®	Biotech Reagent	No	Yes	JT0336	4 L	1,000 L
Hydrochloric Acid, 6.0N	J.T.Baker®	Biotech Reagent	No	Yes	JT0327	1 L	200 L
Hydrochloric Acid, 25%	J.T.Baker®	Biotech Reagent	No	Yes	JT0323†	19 L	—
Phosphoric Acid, Diluted, 10% (w/v)	J.T.Baker®	N.F, Multi-Compdial	No	Yes	JT5683	19 L	200 L
Phosphoric Acid, 33%	J.T.Baker®	Biotech Reagent	No	Yes	JT0334	19 L	940 L
Sodium Hydroxide, 0.5N	J.T.Baker®	Biotech Reagent	Yes	Yes	JT0329	19 L	200 L
Sodium Hydroxide, 1.0N	J.T.Baker®	Biotech Reagent	Yes	Yes	JT0328	20 L	200 L
Sodium Hydroxide, 5N	J.T.Baker®	Biotech Reagent	No	Yes	JT5668	1 L	200 L
Sodium Hydroxide, 10N	J.T.Baker®	Biotech Reagent	Yes	Yes	JT5000	1 L	940 L
Sodium Hydroxide, 25%	J.T.Baker®	Biotech Reagent	Yes	Yes	JT0338	19 L	1,135 L
Sodium Hydroxide, 50%	J.T.Baker®	Biotech Reagent	No	Yes	JT0339	1 L	1,135 L
<b>Salts</b>							
Calcium Chloride Dihydrate	VWR Bioprocess Chemicals	USP, EP, BP, JP	Yes	Yes	VWRB556	1kg	12kg
Potassium Chloride	VWR Bioprocess Chemicals	USP, EP, BP, JP	Yes	Yes	VWRB395	500g	50kg
Potassium Phosphate Monobasic, Anhydrous	VWR Bioprocess Chemicals	NF, EP, BP	Yes	Yes	VWRB0781	1kg	12kg
Sodium Acetate, Anhydrous	VWR Bioprocess Chemicals	USP	Yes	Yes	VWRB602	2.5kg	12kg
Sodium Acetate Trihydrate	VWR Bioprocess Chemicals	USP, BP	Yes	Yes	VWRB530	500g	12kg
Sodium Chloride	VWR Bioprocess Chemicals	USP, EP, BP, JP	Yes	Yes	VWRB241	1kg	350lb
Sodium Citrate Dihydrate	VWR Bioprocess Chemicals	USP, BP, JP	Yes	Yes	VWRB101	500g	100lb
Sodium Hydroxide, Pellets	VWR Bioprocess Chemicals	NF, EP, BP, JP	No	Yes	VWRB583	1kg	12kg
Sodium Phosphate Dibasic, Anhydrous	VWR Bioprocess Chemicals	USP, EP	Yes	Yes	VWRB0404	1kg	12kg
Sodium Phosphate Dibasic Dihydrate	VWR Bioprocess Chemicals	USP, BP, EP	Yes	Yes	VWRB709	1kg	12kg
Sodium Phosphate Dibasic Heptahydrate	VWR Bioprocess Chemicals	ACS, USP	Yes	Yes	VWRB0348	1kg	12kg
Sodium Phosphate Monobasic Monohydrate	VWR Bioprocess Chemicals	ACS, USP, BP	Yes	Yes	VWRB0823	1kg	12kg
<b>Sugars</b>							
Dextrose, Anhydrous	J.T.Baker®	Multi-Compdial	Yes	Yes	JT1920	2.5 kg	200 lb
Dextrose Monohydrate	J.T.Baker®	Multi-Compdial	Yes	Yes	JT1913	5 kg	12 kg
Galactose	J.T.Baker®	HPLC, Multi-Compdial	Yes	Yes	JT6322	1 kg	12 kg
Lactose Monohydrate	J.T.Baker®	Multi-Compdial	Yes	Yes	JT2250	2.5 kg	12 kg
Mannitol, Powder	J.T.Baker®	Multi-Compdial	Yes	Yes	JT2553	500 g	50 kg
Sorbitol	J.T.Baker®	Multi-Compdial	Yes	Yes	JT3449	5 kg	50 kg
Sucrose, Beet Derived	J.T.Baker®	HPLC, Multi-Compdial	Yes	Yes	JT6321	1 kg	12 kg
Sucrose, Cane Derived	J.T.Baker®	HPLC, Multi-Compdial	Yes	Yes	JT6320	1 kg	12 kg
Sucrose, Crystal	J.T.Baker®	Multi-Compdial	Yes	Yes	JT4074	500 g	90 kg
Sucrose, Crystal	J.T.Baker®	BAKER ANALYZED™ ACS Reagent	No	No	JT4072	500 g	100 lb
Trehalose	J.T.Baker®	HPLC, Multi-Compdial	Yes	Yes	JT6324	1 kg	12 kg
<b>Surfactants</b>							
Octyl Phenol Ethoxylate	J.T.Baker®	Technical	No	Yes	JTX199	100 ml	1 L
Polysorbate 20	J.T.Baker®	NF	Yes	Yes	JT4116	20 ml	19 L
Polysorbate 20, Super Refined	J.T.Baker®	HPLC, Multi-Compdial	Yes	Yes	JT4600	200 mL	4 L
Polysorbate 80	J.T.Baker®	NF	Yes	Yes	JT4117	20 mL	19 L
Polysorbate 80, Super Refined	J.T.Baker®	Multi-Compdial	Yes	Yes	JT4500	200 mL	4 L
Sodium Dodecyl Sulfate	J.T.Baker®	Ultrapure Bioreagent	No	No	JT4095	100 gr	12 kg

\*Note: products shown may not be readily available in all regions without prior arrangement. Contact your Avantor account manager to confirm availability.

\*Additional sizes may be available. For the latest product information or more details, contact your Avantor account manager.

# Excipients



Avantor has a strong history as an excipient supplier for the pharmaceutical and biopharmaceutical industry. Choose from a broad portfolio of high-quality, traditional and novel excipients that support scale-up efficiency—from discovery and development, to full commercial production—for both large and small molecule products.

### Avantor® liquid dosage form excipients for use in suspensions

Product	Brand	Grade	Endotoxin Tested	Avantor MOC Code	Cat. No.	Sizes*
<b>Preservatives</b>						
Butyl Paraben	Macron Fine Chemicals®	NF, BP, EP, JP	No	R	<b>MK7558</b>	25 kg —
<b>Surfactants</b>						
Polysorbate 20	J.T.Baker®	NF, EP, BP, JP	Yes	R	<b>JT4116</b>	20 mL 19 L
Polysorbate 20, Super Refined	J.T.Baker®	HPLE, Multi-Compendial	Yes	R	<b>JT4600</b>	200 mL 4 L
Polysorbate 80	J.T.Baker®	NF, EP, BP, JP	Yes	R	<b>JT4117</b>	20 mL 19 L
Polysorbate 80, Refined	J.T.Baker®	NF, EP, BP, JP	Yes	R	<b>JT4500</b>	200 mL 4 L

\*Additional sizes may be available. For the latest product information or more details, contact your Avantor account manager.

### Avantor® liquid dosage form excipients for use in syrups

Product	Brand	Grade	Endotoxin Tested	Avantor MOC Code	Cat. No.	Sizes*
<b>Acidulants</b>						
L-Tartaric Acid	VWR Bioprocess Chemicals	NF, EP, BP, JP	Yes	—	<b>VWRB501</b>	500g 50kg
<b>Active Ingredients, Buffering Agents &amp; Stabilizers</b>						
L-Cystine Dihydrochloride	VWR Bioprocess Chemicals	Bioreagent	No	—	<b>VWRB21502</b>	1kg 25kg
L-Lysine, Anhydrous	VWR Bioprocess Chemicals	Bioreagent	No	—	<b>VWRB42307</b>	1kg 25kg
L-Tyrosine Disodium Dihydrate	VWR Bioprocess Chemicals	Bioreagent	No	—	<b>VWRB87058</b>	1kg 25kg
<b>Antioxidants</b>						
Sodium Bisulfite	Macron Fine Chemicals®	FCC	No	NI	<b>MK7444</b>	500 g 12 kg
Sodium Metabisulfite, Granular	Macron Fine Chemicals®	NF, FCC	No	R	<b>MK7776</b>	2.5 kg 400 lb
<b>Buffering Agents</b>						
Citric Acid, Anhydrous, Powder	J.T.Baker®	USP	No	R	<b>JT0122</b>	500 g 200 lb
Citric Acid, Anhydrous, Powder	J.T.Baker®	Multi-compendial	No	R	<b>JT0127</b>	2.5 kg 12 kg
Citric Acid, Anhydrous	VWR Bioprocess Chemicals	USP, EP, BP, JP	Yes	—	<b>VWRB805</b>	2.5KG 12 kg
Citric Acid Monohydrate, Crystalline Powder	J.T.Baker®	USP, FCC	No	R	<b>JT0120</b>	2.5 kg —
Citric Acid Monohydrate, Granular	Macron Fine Chemicals®	USP	No	R	<b>MK0616</b>	500 g 12 kg

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Product	Brand	Grade	Endotoxin Tested	Avantor MOC Code	Cat. No.	Sizes*
Citric Acid Monohydrate, Granular	Macron Fine Chemicals®	USP, EP, BP	Yes	R	MK7788	2.5 kg 12 kg
Citric Acid Monohydrate, Granular	J.T.Baker®	USP, BP, EP, JP	No	R	JT0115	500 g 50 kg
Citric Acid Monohydrate, Granular	J.T.Baker®	USP, BP, EP, JP	Yes	R	JT0116	12 kg —
Citric Acid Monohydrate	VWR Bioprocess Chemicals	USP, EP, BP, JP	Yes	—	VWRB908	500g 50kg
Potassium Phosphate Monobasic, Anhydrous	VWR Bioprocess Chemicals	NF, EP, BP	Yes	—	VWRB0781	1kg 12kg
Sodium Carbonate, Anhydrous	VWR Bioprocess Chemicals	NF, EP, BP, JP	Yes	—	VWRB585	2.5kg 12kg
Sodium Carbonate Monohydrate	VWR Bioprocess Chemicals	NF, EP, BP	Yes	—	VWRB427	2.5kg 12kg
Sodium Citrate Dihydrate, Crystal	Macron Fine Chemicals®	USP, FCC	No	R	MK0734	500 g 12 kg
Sodium Citrate Dihydrate, Crystalline Powder	Macron Fine Chemicals®	USP-GenAR	No	R	MK7773	500 g 100 kg
Sodium Citrate Dihydrate, Granular	J.T.Baker®	USP, FCC	Yes	R	JT3649	500 g 100 kg
Sodium Citrate Dihydrate, Granular	J.T.Baker®	USP, BP, EP, JP	Yes	R	JT3647	500 g 100 lb
Sodium Citrate Dihydrate, Granular	J.T.Baker®	USP, BP, EP, JP	No	R	JT3648	12 kg —
Sodium Citrate Dihydrate	VWR Bioprocess Chemicals	USP, BP, JP	Yes	—	VWRB101	500g 100lb
Sodium Citrate Dihydrate, Powder	J.T.Baker®	USP, FCC	No	R	JT3650	500 g 2.5 kg
Sodium Hydroxide, Pellets	Macron Fine Chemicals®	USP, FCC	Yes	R	MK7680	500 g 110 lb
Sodium Hydroxide, Pellets	Macron Fine Chemicals®	NF, FCC, EP, BP, JP	No	R	MK7772	2.5 kg 220 lb
Sodium Hydroxide, Pellets	J.T.Baker®	NF, FCC	No	R	JT3728	12 kg 220 lb
Sodium Hydroxide, Pellets	J.T.Baker®	NF, EP, BP, JP	Yes	R	JT3718	12 kg 220 lb
Sodium Hydroxide, Pellets	VWR Bioprocess Chemicals	NF, EP, BP, JP	No	—	VWRB583	1kg 12kg
Sodium Phosphate Dibasic, Anhydrous	J.T.Baker®	USP, FCC, ACS	Yes	R	JT3826	12 kg 100lb
Sodium Phosphate Dibasic, Anhydrous	J.T.Baker®	USP, FCC	No	R	JT3827	500 g 12 kg
Sodium Phosphate Dibasic, Anhydrous	J.T.Baker®	USP, EP, JP	Yes	R	JT3804	500 g 50 kg
Sodium Phosphate Dibasic, Anhydrous	VWR Bioprocess Chemicals	USP, EP	Yes	—	VWRB0404	1kg 12kg
Sodium Phosphate Dibasic Dihydrate	VWR Bioprocess Chemicals	USP, BP, EP	Yes	—	VWRB709	1kg 12kg
Sodium Phosphate Dibasic Heptahydrate	VWR Bioprocess Chemicals	ACS, USP	Yes	—	VWRB0348	1kg 12kg
Sodium Phosphate Dibasic Heptahydrate	J.T.Baker®	USP, EP	Yes	HR	JT3803	500 g 200 lb
Sodium Phosphate Dibasic Heptahydrate, Crystal	J.T.Baker®	USP	No	HR	JT3816	2.5 kg 12 kg
Sodium Phosphate Dibasic Heptahydrate, Crystal	J.T.Baker®	USP	Yes	HR	JT3817	500 g 25 lb
Sodium Phosphate Monobasic Monohydrate	VWR Bioprocess Chemicals	ACS, USP, BP	Yes	—	VWRB0823	1kg 12kg
Sodium Phosphate Monobasic Monohydrate	J.T.Baker®	USP, EP, BP	Yes	HR	JT3802	500 g 50 kg
Sodium Phosphate Monobasic Monohydrate, Crystal	J.T.Baker®	USP, FCC	No	HR	JT3821	500 g 100 lb
Sodium Phosphate Monobasic Monohydrate, Crystal	J.T.Baker®	USP, FCC	No	HR	JT3820	500 g 100 lb
<b>Bulking Agents &amp; Preservatives</b>						
Ammonium Sulfate	VWR Bioprocess Chemicals	ACS, NF	Yes	—	VWRB191	500g 100kg
Calcium Chloride Dihydrate	VWR Bioprocess Chemicals	USP, EP, BP, JP	Yes	—	VWRB556	1kg 12kg
Potassium Chloride	VWR Bioprocess Chemicals	USP, EP, BP, JP	Yes	—	VWRB395	500g 50kg
<b>Chelating Agents</b>						
Edetate Disodium	Macron Fine Chemicals®	USP	Yes	R	MK1395	500 g 100 lb
Edetate Disodium	Macron Fine Chemicals®	USP, FCC, BP, EP	No	R	MK7727	500 g 12 kg
Edetate Disodium	J.T.Baker®	USP	No	R	JT8994	500 g 100 lb
Edetate Disodium	J.T.Baker®	USP, BP, EP, JP	Yes	R	JT8995	12 kg 100 lb
<b>Preservatives</b>						
Benzyl Alcohol	Macron Fine Chemicals®	USP	No	R	MK1403	1 L 463 lb
Methyl Paraben	Macron Fine Chemicals®	NF, FCC, BP, EP, JP	No	R	MK6215	5 kg 25 kg
Propyl Paraben	Macron Fine Chemicals®	NF, FCC, BP, EP, JP	No	R	MK7624	5 kg 25 kg
Sodium Benzoate	Macron Fine Chemicals®	NF, FCC	No	R	MK0168	2.5 kg —
Sodium Benzoate	J.T.Baker®	NF, FCC	No	R	JT3500	500 g 2.5 kg
Sodium Benzoate	J.T.Baker®	NF, BP, EP	No	R	JT3501	2.5 kg 55 lb
Sodium Benzoate, Dense	Macron Fine Chemicals®	NF, FCC	No	R	JT1331	45 kg —
Sodium Benzoate, Dust Free	Macron Fine Chemicals®	NF, FCC	Yes	R	JT1454	45 kg —
Sodium Chloride	VWR Bioprocess Chemicals	USP, EP, BP, JP	Yes	—	VWRB241	1kg 350lb
<b>Preservatives &amp; Buffering Agents</b>						
Sodium Acetate, Anhydrous	J.T.Baker®	USP, FCC	No	R	JT3473	2.5 kg 200 lb
Sodium Acetate, Anhydrous	J.T.Baker®	USP, FCC	No	R	JT3474	12 kg
Sodium Acetate, Anhydrous	VWR Bioprocess Chemicals	USP	Yes	—	VWRB602	2.5kg 12kg
Sodium Acetate Trihydrate, Crystal	J.T.Baker®	USP, FCC	No	HR	JT3462	500 g 275 lb
Sodium Acetate Trihydrate, Crystal	J.T.Baker®	USP, BP, EP, JP	Yes	HR	JT3461	500 g 275 lb
Sodium Acetate Trihydrate	VWR Bioprocess Chemicals	USP, BP	Yes	—	VWRB530	500g 12kg
<b>Sweeteners</b>						
Dextrose, Anhydrous	VWR Bioprocess Chemicals	USP, EP, BP, JP	Yes	—	VWRB876	1kg 200lb
D-Galactose	VWR Bioprocess Chemicals	NF, EP	Yes	—	VWRB3441	1kg 12kg
Sucrose	VWR Bioprocess Chemicals	NF, BP, JP	Yes	—	VWRB335	100g 50kg
D-Trehalose Dihydrate	VWR Bioprocess Chemicals	NF, EP	Yes	—	VWRB3599	1kg 12kg

Avantor® parenteral dosage form excipients

Product	Brand	Grade	Endotoxin Tested	Avantor MOC Code	Cat. No.	Sizes*	
<b>Antioxidants</b>							
Ascorbic Acid, Fine Granular	J.T.Baker®	USP, FCC	No	R	JT0938	125 g	1 kg
Ascorbic Acid, Crystalline Powder	J.T.Baker®	USP, FCC	No	R	JT0936	500 g	1 kg
Ascorbic Acid, Fine Powder	J.T.Baker®	USP, FCC	No	R	JT0937	500 g	1 kg
Ascorbic Acid, Fine Powder	J.T.Baker®	USP, EP, BP, JP	No	R	JT0939	500 g	1 kg
Ascorbic Acid, Very Fine Powder	Macron Fine Chemicals®	USP	No	R	MK8829	500 g	—
L-Cysteine Hydrochloride Monohydrate	J.T.Baker®	USP, FCC, EP, BP	Yes	R	JT2071	100 g	1 kg
L-Methionine	J.T.Baker®	USP, FCC, EP, BP, JP	Yes	R	JT2085	100 g	12 kg
Sodium Metabisulfite	J.T.Baker®	NF, EP, BP, JP	No	R	JT3551	2.5 kg	—
<b>Buffering Agents</b>							
Acetic Acid, 36%	Macron Fine Chemicals®	NF	No	R	MK2488	2.5 L	—
Acetic Acid, Glacial	Macron Fine Chemicals®	USP, FCC, ACS	No	R	MK3121	500 mL	2.5 L
Acetic Acid, Glacial	J.T.Baker®	USP, FCC	No	R	JT9522	500 mL	450 lb
Acetic Acid, Glacial	J.T.Baker®	USP, EP, BP, JP	No	R	JT9526	500 mL	450 lb
Ammonium Sulfate	J.T.Baker®	NF	Yes	R	JT0798	500 g	100 kg
Boric Acid, Granular	Macron Fine Chemicals®	NF	No	R	MK1394	12 kg	330 lb
Citric Acid, Anhydrous, Powder	J.T.Baker®	USP	No	R	JT0122	500 g	200 lb
Citric Acid, Anhydrous, Powder	J.T.Baker®	USP, EP, BP, JP	No	R	JT0127	2.5 kg	12 kg
Citric Acid Monohydrate, Granular	Macron Fine Chemicals®	USP	No	R	MK0616	500 g	12 kg
Citric Acid Monohydrate, Granular	J.T.Baker®	USP, FCC	Yes	R	JT0119	500 g	110 lb
Citric Acid, Monohydrate, Granular	J.T.Baker®	USP, EP, BP, JP	No	R	JT0115	500 g	50 kg
Citric Acid Monohydrate, Granular	J.T.Baker®	USP, EP, BP, JP	Yes	R	JT0116	12 kg	—
Citric Acid Monohydrate, Crystalline Powder	J.T.Baker®	USP, FCC	No	R	JT0120	2.5 kg	—
Glycine	J.T.Baker®	USP, FCC	No	R	JT0581	500 g	12 kg
Glycine	J.T.Baker®	USP, EP, BP, JP	No	R	JT0582	500 g	50 kg
L-Histidine Monohydrochloride	J.T.Baker®	FCC, BP, EP	Yes	R	JT2081	1 kg	50 kg
Hydrochloric Acid, 36.5–38%	Macron Fine Chemicals®	NF, FCC, ACS	No	R	MK2612	500 mL	500 lb
Hydrochloric Acid, 36.5–38%	J.T.Baker®	NF, EP, BP, JP	No	R	JT9544	500 mL	475 lb
Hydrochloric Acid, 36.5–38%	Macron Fine Chemicals®	NF, EP, BP, JP	No	R	MK2515	2.5 L	—
Hydrochloric Acid, Diluted	Macron Fine Chemicals®	NF	No	R	MK2608	500 mL	50 L
L-Lysine Hydrochloride	J.T.Baker®	USP, FCC, EP, BP, JP	Yes	R	JT2084	1 kg	50 kg
Phosphoric Acid	J.T.Baker®	NF, EP, BP	No	R	JT0268	500 mL	700 lb
Phosphoric Acid	J.T.Baker®	NF, FCC	No	R	JT0262	4 L	200 lb
Phosphoric Acid, Diluted	J.T.Baker®	NF, EP, BP	No	R	JT5683	19 L	425 lb
Potassium Phosphate Dibasic	J.T.Baker®	USP	No	R	JT3251	12 kg	100 kg
Potassium Phosphate Dibasic	J.T.Baker®	USP, EP, BP	Yes	R	JT3250	500 g	100 kg
<b>Chelating Agents</b>							
Edetate Disodium	J.T.Baker®	USP	No	R	JT8994	500 g	100 lb
Edetate Disodium	Macron Fine Chemicals®	USP	Yes	R	MK1395	500 g	100 lb
Edetate Disodium	J.T.Baker®	USP, BP, EP, JP	Yes	R	JT8995	12 kg	100 lb
Edetate Disodium	Macron Fine Chemicals®	USP, FCC, BP, EP	No	R	MK7727	500 g	12 kg
<b>Preservatives</b>							
Benzyl Alcohol	Macron Fine Chemicals®	USP	No	R	MK1403	1 L	463 lb
Butylparaben	Macron Fine Chemicals®	NF, BP, EP, JP	No	R	MK7558	25 kg	—
Methyl Paraben	Macron Fine Chemicals®	NF, FCC, BP, EP, JP	No	R	MK6215	5 kg	25 kg
Phenol, Crystal	Macron Fine Chemicals®	USP	No	R	MK0605	500 g	2.5 kg
Phenol, Liquefied	J.T.Baker®	USP	No	R	JT2864	500 mL	4 L
Propyl Paraben	Macron Fine Chemicals®	NF, FCC, BP, EP, JP	No	R	MK7624	5 kg	25 kg
Sodium Benzoate	Macron Fine Chemicals®	NF, FCC	No	R	MK0168	2.5 kg	—
Sodium Benzoate	J.T.Baker®	NF, FCC	No	R	JT3500	500 g	2.5 kg
Sodium Benzoate	J.T.Baker®	NF, BP, EP	No	R	JT3501	2.5 kg	55 lb
Sodium Benzoate, Dense	Macron Fine Chemicals®	NF, FCC	No	R	MK1331	45 kg	—
Sodium Benzoate, Dust Free	Macron Fine Chemicals®	NF, FCC	Yes	R	MK1454	45 kg	—
<b>Preservatives &amp; Solvents</b>							
Propylene Glycol	Macron Fine Chemicals®	USP, FCC	No	R	MK6263	20 L	—
Propylene Glycol	J.T.Baker®	USP, FCC	Yes	R	JT9402	500 mL	480 lb
Propylene Glycol	J.T.Baker®	USP, BP, EP, JP	Yes	R	JT9403	500 mL	480 lb
<b>Preservatives, Solvents &amp; Sweeteners</b>							
Glycerin	J.T.Baker®	USP	Yes	R	JT2142	500 mL	550 lb
Glycerin	J.T.Baker®	USP, FCC	No	R	JT2140	500 mL	550 lb
Glycerin	J.T.Baker®	USP, BP, EP, JP	No	R	JT2143	500 mL	2200 lb

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Product	Brand	Grade	Endotoxin Tested	Avantor MOC Code	Cat. No.	Sizes*	
<b>Preservatives, Therapeutic Agents &amp; Electrolyte Balancers</b>							
Calcium Acetate	Macron Fine Chemicals®	USP	No	R	MK2003	50 kg	—
<b>Solvents</b>							
Glycerin	J.T.Baker®	USP, FCC	No	R	JT2140	500 mL	550 lb
Glycerin	J.T.Baker®	USP	Yes	R	JT2142	500 mL	550 lb
Glycerin	J.T.Baker®	USP, BP, EP, JP	No	R	JT2143	500 mL	2200 lb
Propylene Glycol	Macron Fine Chemicals®	USP, FCC	No	R	JT6263	20 L	—
Propylene Glycol	J.T.Baker®	USP, FCC	Yes	R	JT9402	500 mL	480 lb
Propylene Glycol	J.T.Baker®	USP, BP, EP, JP	Yes	R	JT9403	500 mL	480 lb
<b>Stabilizers</b>							
Asparagine, Anhydrous	VWR Bioprocess Chemicals	Bioreagent	No	—	VWRB15005	1kg	25kg
L-Cystine Dihydrochloride	VWR Bioprocess Chemicals	Bioreagent	No	—	VWRB21502	1kg	25kg
L-Lysine, Anhydrous	VWR Bioprocess Chemicals	Bioreagent	No	—	VWRB42307	1kg	25kg
L-Tyrosine Disodium Dihydrate	VWR Bioprocess Chemicals	Bioreagent	No	—	VWRB87058	1kg	25kg
<b>Stabilizers &amp; Tonicity Adjusters</b>							
D-Galactose	VWR Bioprocess Chemicals	NF, EP	Yes	—	VWRB3441	1kg	12kg
D-Trehalose Dihydrate	VWR Bioprocess Chemicals	NF, EP	Yes	—	VWRB3599	1kg	12kg
Sucrose	VWR Bioprocess Chemicals	NF, BP, JP	Yes	—	VWRB335	100g	50kg
<b>Sweeteners</b>							
Dextrose, Anhydrous	J.T.Baker®	USP	Yes	R	JT1919	500 g	200 lb
Dextrose, Anhydrous, Granular	Macron Fine Chemicals®	USP	Yes	R	MK4908	2.5 kg	100 lb
Dextrose, Anhydrous	J.T.Baker®	USP, BP, EP, JP	Yes	R	JT1920	2.5 kg	200 lb
Dextrose, Anhydrous, Granular	Macron Fine Chemicals®	USP, BP, EP, JP	Yes	R	MK7730	2.5 kg	100 lb
Dextrose Monohydrate, Powder	J.T.Baker®	USP, Multi-Compendial	Yes	R	JT1913	5 kg	12 kg
Sucrose	Macron Fine Chemicals®	NF	Yes	R	MK7724	12 kg	—
Sucrose	Macron Fine Chemicals®	NF, EP, BP	Yes	R	MK7723	1 kg	100 lb
Sucrose, Crystal	J.T.Baker®	NF, Multi-Compendial	Yes	R	JT4074	500 g	90 kg
Potassium Phosphate Monobasic, Crystal	Macron Fine Chemicals®	NF	No	R	MK7746	500 g	12 kg
Potassium Phosphate Monobasic, Crystal	J.T.Baker®	NF, FCC	Yes	R	JT3247	2.5 kg	100 kg
Potassium Phosphate Monobasic, Crystal	J.T.Baker®	NF, BP, EP	Yes	R	JT3248	500 g	12 kg
Sodium Acetate, Anhydrous	J.T.Baker®	USP, FCC	No	R	JT3473	2.5 kg	200 lb
Sodium Acetate, Anhydrous	J.T.Baker®	USP, FCC	No	R	JT3474	12 kg	—
Sodium Acetate Trihydrate, Crystal	J.T.Baker®	USP, FCC	No	HR	JT3462	500 g	275 lb
Sodium Acetate Trihydrate, Crystal	J.T.Baker®	USP, BP, EP, JP	Yes	HR	JT3461	500 g	275 lb
Sodium Bicarbonate, Powder	Macron Fine Chemicals®	USP, FCC	No	R	MK7396	2.5 kg	25 kg
Sodium Bicarbonate, Powder	J.T.Baker®	USP, FCC	No	R	JT3509	500 g	100 lb
Sodium Bicarbonate, Powder	J.T.Baker®	USP, EP, BP, JP	Yes	R	JT3510	2.5 kg	100 lb
Sodium Borate Decahydrate	Macron Fine Chemicals®	NF	No	R	MK7418	300 lb	—
Sodium Borate Decahydrate	J.T.Baker®	NF	No	R	JT3574	500 g	12 kg
Sodium Borate Decahydrate	J.T.Baker®	NF, EP, BP, JP	Yes	R	JT3575	12 kg	—
Sodium Citrate Dihydrate, Powder	J.T.Baker®	USP, FCC	No	R	JT3650	500 g	2.5 kg
Sodium Citrate Dihydrate, Crystal	Macron Fine Chemicals®	USP, FCC	No	R	MK0734	500 g	12 kg
Sodium Citrate Dihydrate, Granular	J.T.Baker®	USP, FCC	Yes	R	JT3649	500 g	100 kg
Sodium Citrate Dihydrate, Granular	J.T.Baker®	USP, EP, BP, JP	Yes	R	JT3647	500 g	100 lb
Sodium Citrate Dihydrate, Granular	J.T.Baker®	USP, EP, BP, JP	No	R	JT3648	12 kg	—
Sodium Hydroxide, Pellets	Macron Fine Chemicals®	USP, FCC	Yes	R	MK7680	500 g	110 lb
Sodium Hydroxide, Pellets	Macron Fine Chemicals®	NF, FCC, EP, BP, JP	No	R	MK7772	2.5 kg	220 lb
Sodium Hydroxide, Pellets	J.T.Baker®	NF, FCC	No	R	JT3728	12 kg	220 lb
Sodium Hydroxide, Pellets	J.T.Baker®	NF, EP, BP, JP	Yes	R	JT3718	12 kg	220 lb
Sodium Phosphate Dibasic, Anhydrous	J.T.Baker®	USP, FCC, ACS	Yes	R	JT3826	12 kg	100lb
Sodium Phosphate Dibasic, Anhydrous	J.T.Baker®	USP, FCC	No	R	JT3827	500 g	12 kg
Sodium Phosphate Dibasic, Anhydrous	J.T.Baker®	USP, EP, JP	Yes	R	JT3804	500 g	50 kg
Sodium Phosphate Dibasic Heptahydrate	J.T.Baker®	USP, EP	Yes	HR	JT3803	500 g	200 lb
Sodium Phosphate Dibasic Heptahydrate	J.T.Baker®	USP	No	HR	JT3816	2.5 kg	12 kg
Sodium Phosphate Dibasic Heptahydrate	J.T.Baker®	USP	Yes	HR	JT3817	500 g	25 LB
Sodium Phosphate Monobasic Monohydrate	J.T.Baker®	NF, FCC	Yes	HR	JT3802	500 g	50 kg
Sodium Phosphate Monobasic Monohydrate, Crystal	J.T.Baker®	USP, FCC	No	HR	JT3821	500 g	100 lb
Sodium Phosphate Monobasic Monohydrate, Crystal	J.T.Baker®	USP, FCC	No	HR	JT3820	500 g	100 lb
Sulfuric Acid, 95–98%	J.T.Baker®	NF, EP, BP	No	R	JT9671	500 mL	4050 lb
Sulfuric Acid, 95–98%	J.T.Baker®	NF, FCC	No	R	JT9675	500 mL	700 lb

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# BIOPHARMACEUTICAL PRODUCTS

Continued from previous page

Product	Brand	Grade	Endotoxin Tested	Avantor MOC Code	Cat. No.	Sizes*	
<b>Tonicity Adjusters</b>							
L-Arginine	J.T.Baker®	USP, FCC, BP, EP	Yes	R	JT2066	1 kg	50 kg
L-Arginine Hydrochloride	J.T.Baker®	USP, FCC, BP, EP, JP	Yes	R	JT2067	1 kg	50 kg
Calcium Chloride Dihydrate, Granular	J.T.Baker®	USP, FCC	Yes	R	JT1336	500 g	300 lb
Calcium Chloride Dihydrate, Granular	J.T.Baker®	USP, BP, EP, JP	Yes	R	JT1335	12 kg	—
Calcium Chloride Dihydrate	VWR Bioprocess Chemicals	USP, EP, BP, JP	Yes	—	VWRB556	1kg	12kg
Dextrose, Anhydrous	J.T.Baker®	USP	Yes	R	JT1919	500 g	200 lb
Dextrose, Anhydrous	J.T.Baker®	USP, EP, BP, JP	Yes	R	JT1920	2.5 kg	200 lb
Dextrose, Anhydrous	VWR Bioprocess Chemicals	USP, EP, BP, JP	Yes	—	VWRBK876	1kg	200lb
Dextrose, Anhydrous, Granular	Macron Fine Chemicals®	USP	Yes	R	MK4908	2.5 kg	100 lb
Dextrose, Anhydrous, Granular	Macron Fine Chemicals®	USP, EP, BP, JP	Yes	R	MK7730	2.5 kg	12 kg
Dextrose Monohydrate, Powder	J.T.Baker®	USP, Multi-Compendial	Yes	R	JT1913	5 kg	12 kg
Glycerin	J.T.Baker®	USP	Yes	R	JT2142	500 mL	550 lb
Glycerin	J.T.Baker®	USP, FCC	No	R	JT2140	500 mL	550 lb
Glycerin	J.T.Baker®	USP, BP, EP, JP	No	R	JT2143	500 mL	2200 lb
Glycine	J.T.Baker®	USP, FCC	No	R	JT0581	500 g	12 kg
Glycine	J.T.Baker®	USP, EP, BP, JP	No	R	JT0582	500 g	50 kg
L-Histidine	J.T.Baker®	USP, FCC, BP, EP, JP	Yes	R	JT2080	100g	12 kg
L-Histidine Monohydrochloride	J.T.Baker®	FCC, BP, EP	Yes	R	JT2081	1 kg	50 kg
Lactose Monohydrate, Powder	J.T.Baker®	NF	No	R	JT2249	500 g	12 kg
Lactose Monohydrate, Powder	J.T.Baker®	NF, Multi-Compendial	Yes	R	JT2250	2.5 kg	12 kg
Magnesium Chloride, Hexahydrate	Macron Fine Chemicals®	USP	No	HR	MK5956	2.5 kg	100 lb
Magnesium Chloride, Hexahydrate, Crystal	J.T.Baker®	USP, FCC	No	HR	JT2448	500 g	250 lb
Magnesium Chloride, Hexahydrate, Crystal	J.T.Baker®	USP, BP, EP	Yes	HR	JT2449	500 g	90 lb
Magnesium Sulfate, Anhydrous	Macron Fine Chemicals®	USP	No	R	MK5053	10 kg	200 lb
Magnesium Sulfate, Dried Powder	Macron Fine Chemicals®	USP, FCC	No	R	MK6050	100 lb	—
Magnesium Sulfate, Heptahydrate	Macron Fine Chemicals®	USP, FCC	No	R	MK4200	2.5 kg	12 kg
Magnesium Sulfate, Heptahydrate, Crystal	J.T.Baker®	USP	Yes	R	JT2505	12 kg	—
Magnesium Sulfate, Heptahydrate, Crystal	J.T.Baker®	USP, BP, EP	Yes	R	JT2504	500 g	175 lb
Mannitol	Macron Fine Chemicals®	USP, EP, BP	Yes	R	MK7781	12 kg	—
Mannitol	J.T.Baker®	USP, EP, BP, JP	Yes	R	JT2553	500 g	50 kg
Mannitol	J.T.Baker®	USP, BP, EP, JP	Yes	R	JT3045	500 g	100 lb
Potassium Chloride, Crystal	J.T.Baker®	USP, FCC	No	R	JT3046	500 g	250 lb
Potassium Chloride, Crystal	Macron Fine Chemicals®	USP, FCC	No	R	MK6838	500 g	250 lb
Sodium Chloride, Granular	Macron Fine Chemicals®	USP, FCC	No	R	MK7532	500 g	350 lb
Sodium Chloride, Granular	J.T.Baker®	USP, FCC	No	R	JT3628	500 g	350 lb
Sodium Chloride, Granular	J.T.Baker®	USP, FCC	Yes	R	JT3629	12 kg	100 lb
Sodium Chloride, Granular	Macron Fine Chemicals®	USP, FCC, EP, BP, JP	Yes	R	MK7713	500 g	220 lb
Sodium Chloride, Granular	J.T.Baker®	USP, EP, BP, JP	Yes	R	JT3627	500 g	350 lb
Sodium Chloride, Powder	Macron Fine Chemicals®	USP, EP, BP, JP	Yes	R	MK7540	500 g	100 lb
Sodium Chloride	VWR Bioprocess Chemicals	USP, EP, BP, JP	Yes	—	VWRB241	1kg	350lb
Sodium Sulfate, Anhydrous	Macron Fine Chemicals®	USP	No	R	MK8028	500 g	100 kg
Sodium Sulfate, Anhydrous, Powder	Macron Fine Chemicals®	USP, EP, BP	No	R	MK7803	12 kg	100 kg
Sodium Sulfate, Anhydrous	VWR Bioprocess Chemicals	USP, EP	Yes	—	VWRB836	500g	100kg
Sucrose	Macron Fine Chemicals®	NF	Yes	R	MK7724	12 kg	—
Sucrose	Macron Fine Chemicals®	NF, EP, BP	Yes	R	MK7723	1 kg	100 lb
Sucrose, Crystal	J.T.Baker®	NF, Multi-Compendial	Yes	R	JT4074	500 g	90 kg
L-Threonine	J.T.Baker®	USP, FCC, BP, EP, JP	Yes	R	JT2089	1 kg	12 kg
<b>Tonicity Adjusters</b>							
Polysorbate 20	J.T.Baker®	NF, EP, BP, JP	Yes	R	JT4116	20 mL	19 L
Polysorbate 20, Super Refined	J.T.Baker®	HPLE, Multi-Compendial	Yes	R	JT4600	200 mL	4 L
Polysorbate 80	J.T.Baker®	NF, EP, BP, JP	Yes	R	JT4117	20 mL	19 L
Polysorbate 80, Super Refined	J.T.Baker®	NF, EP, BP, JP	Yes	R	JT4500	200 mL	4 L

\*Additional sizes may be available. For the latest product information or more details, contact your Avantor account manager.



## Avantor® semi-solid dosage form excipients for use in gels

Product	Brand	Grade	Endotoxin Tested	MOC Code	Cat. No.	Sizes*
<b>Antioxidants</b>						
Sodium Bisulfite	Macron Fine Chemicals®	FCC	No	NI	MK7444	500 g 12 kg
Sodium Metabisulfite, Granular	Macron Fine Chemicals®	NF, FCC	No	R	MK7776	2.5 kg 400 lb
<b>Chelating Agents</b>						
Edetate Disodium	J.T.Baker®	USP	No	R	JT8994	500 g 100 lb
Edetate Disodium	Macron Fine Chemicals®	USP	Yes	R	MK1395	500 g 100 lb
Edetate Disodium	Macron Fine Chemicals®	USP, FCC, BP, EP	No	R	MK7727	500 g 12 kg
Edetate Disodium	J.T.Baker®	USP, BP, EP, JP	Yes	R	JT8995	12 kg 100 lb
<b>Preservatives</b>						
Glycerin	J.T.Baker®	USP	Yes	R	JT2142	500 mL 550 lb
Glycerin	J.T.Baker®	USP, FCC	No	R	JT2140	500 mL 550 lb
Glycerin	J.T.Baker®	USP, BP, EP, JP	No	R	JT2143	500 mL 2200 lb
Methyl Paraben (Nipagin)	Macron Fine Chemicals®	NF, FCC, BP, EP, JP	No	R	MK6215	5 kg 25 kg
Propyl Paraben (Nipasol)	Macron Fine Chemicals®	NF, FCC, BP, EP, JP	No	R	MK7624	5 kg 25 kg
<b>Solvents &amp; Preservatives</b>						
Isopropyl Alcohol	Macron Fine Chemicals®	USP	No	R	MK3031	4 L 345 lb
Isopropyl Alcohol	J.T.Baker®	USP, BP, EP, JP	No	R	JT9037	500 mL 20 L
Propylene Glycol	Macron Fine Chemicals®	USP, FCC	No	R	MK6263	20 L —
Propylene Glycol	J.T.Baker®	USP, FCC	Yes	R	MK9402	500 mL 480 lb
Propylene Glycol	J.T.Baker®	USP, BP, EP, JP	Yes	R	MK9403	500 mL 480 lb

\*Additional sizes may be available. For the latest product information or more details, contact your Avantor account manager.

## Avantor® semi-solid dosage form excipients for use in creams

Product	Brand	Grade	Endotoxin Tested	MOC Code	Cat. No.	Sizes*
<b>Acidifying Agents</b>						
Phosphoric Acid	J.T.Baker®	USP, EP, BP, JP	No	R	JT0268	500 mL 700 lb
Phosphoric Acid	J.T.Baker®	NF, FCC	No	R	JT0262	4 L 200 lb
Phosphoric Acid	Macron Fine Chemicals®	NF, FCC	No	R	MK2788	500 mL 700 lb
<b>Antimicrobial Preservatives</b>						
Boric Acid	J.T.Baker®	NF	No	R	JT0091	500 g 2.5 kg
Boric Acid	Macron Fine Chemicals®	NF	No	R	MK1394	12 kg 330lb
Boric Acid	J.T.Baker®	NF, EP, BP, JP	Yes	R	JT0092	2.5 kg 50 kg
<b>Antioxidants</b>						
Sodium Bisulfite	Macron Fine Chemicals®	FCC	No	NI	MK7444	500 g 12 kg
Sodium Metabisulfite, Granular	Macron Fine Chemicals®	NF, FCC	No	R	MK7776	2.5 kg 400 lb
<b>Buffering Agents</b>						
Potassium Hydroxide, Pellets	Macron Fine Chemicals®	NF, FCC	No	R	MK6976	500 g 110 lb
Potassium Hydroxide, Pellets	J.T.Baker®	NF, EP, BP, JP	No	R	JT3152	500 g 2.5 kg
Sodium Citrate Dihydrate, Crystal	Macron Fine Chemicals®	USP-GenAR	No	R	MK7773	500 g 100 kg
Sodium Citrate Dihydrate, Crystal	Macron Fine Chemicals®	USP, FCC	No	R	MK0734	500 g 12 kg
Sodium Citrate Dihydrate, Granular	J.T.Baker®	USP, FCC	Yes	R	JT3649	500 g 100 kg
Sodium Citrate Dihydrate, Granular	J.T.Baker®	USP, EP, BP, JP	Yes	R	JT3647	500 g 100 lb
Sodium Citrate Dihydrate, Granular	J.T.Baker®	USP, EP, BP, JP	No	R	JT3648	12 kg —
Sodium Citrate, Dihydrate, Powder	J.T.Baker®	USP, FCC	No	R	JT3650	500 g 2.5 kg
Sodium Hydroxide, Pellets	Macron Fine Chemicals®	USP, FCC	Yes	R	MK7680	500 g 110 lb
Sodium Hydroxide, Pellets	Macron Fine Chemicals®	NF, FCC, EP, BP, JP	No	R	MK7772	2.5 kg 220 lb
Sodium Hydroxide, Pellets	J.T.Baker®	NF, FCC	No	R	JT3728	12 kg 220 lb
Sodium Hydroxide, Pellets	J.T.Baker®	NF, EP, BP, JP	Yes	R	JT3718	12 kg 220 lb
Sodium Phosphate Dibasic, Anhydrous	J.T.Baker®	USP, FCC, ACS	Yes	R	JT3826	12 kg 100lb
Sodium Phosphate Dibasic, Anhydrous	J.T.Baker®	USP, FCC	No	R	JT3827	500 g 12 kg
Sodium Phosphate Dibasic, Anhydrous	J.T.Baker®	USP, EP, JP	Yes	R	JT3804	500 g 50 kg
Sodium Phosphate, Dibasic, Heptahydrate, Crystal	J.T.Baker®	USP	No	HR	JT3816	2.5 kg 12 kg
Sodium Phosphate, Dibasic, Heptahydrate, Crystal	J.T.Baker®	USP	Yes	HR	JT3817	500 g 25 LB
Sodium Phosphate, Dibasic, Heptahydrate	J.T.Baker®	USP, EP	Yes	HR	JT3803	500 g 200 lb

Continued on next page

# BIOPHARMACEUTICAL PRODUCTS

Continued from previous page

Product	Brand	Grade	Endotoxin Tested	MOC Code	Cat. No.	Sizes*	
Sodium Phosphate Monobasic Monohydrate	J.T.Baker®	USP, EP, BP	Yes	HR	JT3802	500 g	50 kg
Sodium Phosphate Monobasic Monohydrate, Crystal	J.T.Baker®	USP, FCC	No	HR	JT3821	500 g	100 lb
Sodium Phosphate Monobasic Monohydrate, Crystal	J.T.Baker®	USP, FCC	No	HR	JT3820	500 g	100 lb
<b>Chelating Agents</b>							
Citric Acid, Anhydrous	VWR Bioprocess Chemicals	USP, EP, BP, JP	Yes	—	VWRB805	2.5KG	12 KG
Citric Acid, Anhydrous, Powder	J.T.Baker®	USP	No	R	JT0122	500 g	200 lb
Citric Acid Monohydrate	VWR Bioprocess Chemicals	USP, EP, BP, JP	Yes	—	VWRB908	500g	50kg
Citric Acid Monohydrate, Crystalline Powder	J.T.Baker®	USP, FCC	No	R	JT0120	2.5 kg	
Citric Acid Monohydrate, Crystalline Powder	J.T.Baker®	USP, EP, BP, JP	No	R	JT0127	2.5 kg	12 kg
Citric Acid Monohydrate, Granular	Macron Fine Chemicals®	USP	No	R	MK0616	500 g	12 kg
Citric Acid Monohydrate, Granular	Macron Fine Chemicals®	USP, EP, BP	Yes	R	MK7788	2.5 kg	12 kg
Citric Acid Monohydrate, Granular	J.T.Baker®	USP, FCC	Yes	R	JT0119	500 g	110 lb
Citric Acid Monohydrate, Granular	J.T.Baker®	USP, EP, BP, JP	No	R	JT0115	500 g	50 kg
Citric Acid Monohydrate, Granular	J.T.Baker®	USP, EP, BP, JP	Yes	R	JT0116	12 kg	
Edetate Disodium	Macron Fine Chemicals®	USP	Yes	R	MK1395	500 g	100 lb
Edetate Disodium	Macron Fine Chemicals®	USP, FCC, BP, EP	No	R	MK7727	500 g	12 kg
Edetate Disodium	J.T.Baker®	USP	No	R	JT8994	500 g	100 lb
Edetate Disodium	J.T.Baker®	USP, BP, EP, JP	Yes	R	JT8995	12 kg	100 lb
<b>Emollients</b>							
Mineral Oil White	J.T.Baker®	USP	No	R	JT2705	500 mL	—
<b>Oleaginous Vehicles, Solvents</b>							
Mineral Oil White Light (Paraffin Oil, Liquid Petrolatum)	Macron Fine Chemicals®	NF	No	R	MK6358	500 mL	20 L
<b>Penetration Enhancers, Solvents</b>							
Dimethyl Sulfoxide	J.T.Baker®	USP	No	R	JT9033	100 mL	4 L
<b>Preservatives</b>							
Methyl Paraben (Nipagin)	Macron Fine Chemicals®	NF, FCC, BP, EP, JP	No	R	MK6215	5 kg	25 kg
Propyl Paraben (Nipasol)	Macron Fine Chemicals®	NF, FCC, BP, EP, JP	No	R	MK7624	5 kg	25 kg
Sodium Acetate, Anhydrous	J.T.Baker®	USP, FCC	No	R	JT3473	2.5 kg	200 lb
Sodium Acetate Trihydrate, Crystal	J.T.Baker®	USP, FCC	No	HR	JT3462	500 g	275 lb
Sodium Acetate Trihydrate, Crystal	J.T.Baker®	USP, EP, BP, JP	Yes	HR	JT3461	500 g	275 lb
<b>Preservatives, Emollients, Humectants &amp; Solvents</b>							
Glycerin	J.T.Baker®	USP	Yes	R	JT2142	500 mL	550 lb
Glycerin	J.T.Baker®	USP, FCC	No	R	JT2140	500 mL	550 lb
Glycerin	J.T.Baker®	USP, BP, EP, JP	No	R	JT2143	500 mL	2200 lb
<b>Solvents</b>							
Mineral Oil, White, Heavy (Paraffin Oil, Liquid Petrolatum)	Macron Fine Chemicals®	USP	No	R	MK6357	500 mL	20 L
<b>Solvents &amp; Preservatives</b>							
Benzyl Alcohol	J.T.Baker®	USP	No	R	JT9040	4 L	—
Benzyl Alcohol	Macron Fine Chemicals®	USP	No	R	MK1403	1 L	463 lb
Benzyl Alcohol	J.T.Baker®	USP, EP, BP, JP	No	R	JT9421	500 mL	4 L
Benzyl Alcohol	J.T.Baker®	USP, EP, BP, JP	No	R	JT9039	100 mL	4 L
Propylene Glycol	Macron Fine Chemicals®	USP, FCC	No	R	MK6263	20 L	—
Propylene Glycol	J.T.Baker®	USP, FCC	Yes	R	JT9402	500 mL	480 lb
Propylene Glycol	J.T.Baker®	USP, BP, EP, JP	Yes	R	JT9403	500 mL	480 lb
<b>Surfactants</b>							
Polysorbate 20	J.T.Baker®	NF, EP, BP, JP	Yes	R	JT4116	20 mL	19 L
Polysorbate 80	J.T.Baker®	NF, EP, BP, JP	Yes	R	JT4500	200 mL	4 L
Polysorbate 80, Super Refined	J.T.Baker®	NF, EP, BP, JP	Yes	R	JT4117	20 mL	19 L

## Avantor® semi-solid dosage form excipients for use in ointments

Product	Brand	Grade	Endotoxin Tested	MOC Code	Cat. No.	Sizes*
<b>Emollients, Oleaginous Vehicles &amp; Solvents</b>						
Mineral Oil, White	J.T.Baker®	USP	No	R	JT2705	500 mL —
Mineral Oil, White, Heavy (Paraffin Oil, Liquid Petrolatum)	Macron Fine Chemicals®	USP	No	R	MK6357	500 mL 20 L
Mineral Oil, White, Light (Paraffin Oil, Liquid Petrolatum)	Macron Fine Chemicals®	NF	No	R	MK6358	500 mL 20 L
<b>Solvents &amp; Preservatives</b>						
Propylene Glycol	Macron Fine Chemicals®	USP, FCC	No	R	MK6263	20 L
Propylene Glycol	J.T.Baker®	USP, FCC	Yes	R	JT9402	500 mL 480 lb
Propylene Glycol	J.T.Baker®	USP, BP, EP, JP	Yes	R	JT9403	500 mL 480 lb
<b>Therapeutic Agents &amp; Alkalizing Agents</b>						
Sodium Bicarbonate, Powder	Macron Fine Chemicals®	USP, FCC	No	R	MK7396	500 g 300 lb
Sodium Bicarbonate, Powder	J.T.Baker®	USP, FCC	No	R	JT3509	500 g 100 lb
Sodium Bicarbonate, Powder	Macron Fine Chemicals®	USP, FCC, EP, BP, JP	Yes	R	MK7749	2.5 kg 100 lb
Sodium Bicarbonate, Powder	J.T.Baker®	USP, EP, BP, JP	Yes	R	JT3510	2.5 kg 100 lb

## Avantor® semi-solid dosage form excipients for use in mixing

Product	Brand	Grade	Endotoxin Tested	MOC Code	Cat. No.	Sizes*
<b>Buffering Agents</b>						
Potassium Phosphate Monobasic, Anhydrous	VWR Bioprocess Chemicals	NF, EP, BP	Yes	—	VWRB0781	1kg 12kg
Sodium Acetate, Anhydrous	VWR Bioprocess Chemicals	USP	Yes	—	VWRB602	2.5kg 12kg
Sodium Acetate Trihydrate	VWR Bioprocess Chemicals	USP, BP	Yes	—	VWRB530	500g 12kg
Sodium Carbonate, Anhydrous	VWR Bioprocess Chemicals	NF, EP, BP, JP	Yes	—	VWRB585	2.5kg 12kg
Sodium Carbonate Monhydrate	VWR Bioprocess Chemicals	NF, EP, BP	Yes	—	VWRB427	2.5kg 12kg
Sodium Citrate Dihydrate	VWR Bioprocess Chemicals	USP, BP, JP	Yes	—	VWRB101	500g 100lb
Sodium Hydroxide, Pellets	VWR Bioprocess Chemicals	NF, EP, BP, JP	No	—	VWRB583	1kg 12kg
Sodium Phosphate Dibasic, Anhydrous	VWR Bioprocess Chemicals	USP, EP	Yes	—	VWRB0404	1kg 12kg
Sodium Phosphate Dibasic Dihydrate	VWR Bioprocess Chemicals	USP, BP, EP	Yes	—	VWRB709	1kg 12kg
Sodium Phosphate Dibasic Heptahydrate	VWR Bioprocess Chemicals	ACS, USP	Yes	—	VWRB0348	1kg 12kg
Sodium Phosphate Monobasic Monohydrate	VWR Bioprocess Chemicals	ACS, USP, BP	Yes	—	VWRB0823	1kg 12kg
<b>Bulking Agent &amp; Filler</b>						
Calcium Chloride Dihydrate	VWR Bioprocess Chemicals	USP, EP, BP, JP	Yes	—	VWRB556	1kg 12kg
<b>Preservative &amp; API</b>						
Potassium Chloride	VWR Bioprocess Chemicals	USP, EP, BP, JP	Yes	—	VWRB395	500g 50kg
<b>Preservative &amp; Salt</b>						
Sodium Chloride	VWR Bioprocess Chemicals	USP, EP, BP, JP	Yes	—	VWRB241	1kg 350lb

## Avantor® solid dosage form excipients for use in granulation

Product	Brand	Grade	Endotoxin Tested	MOC Code	Cat. No.	Sizes*
<b>Diluents</b>						
Dextrose, Anhydrous	J.T.Baker®	USP	Yes	R	JT1919	500 g 200 lb
Dextrose, Anhydrous, Granular	Macron Fine Chemicals®	USP	Yes	R	MK4908	2.5 kg 100 lb
Dextrose, Anhydrous	J.T.Baker®	USP, EP, BP, JP	Yes	R	JT1920	2.5 kg 200 lb
Dextrose, Anhydrous, Granular	Macron Fine Chemicals®	USP, EP, BP, JP	Yes	R	MK7730	2.5 kg 100 lb
Dextrose, Anhydrous	VWR Bioprocess Chemicals	USP, EP, BP, JP	Yes	—	VWRBK876	1kg 200lb
Dextrose Monohydrate, Powder	J.T.Baker®	USP, Multi-Compendial	Yes	R	JT1913	5 kg 12 kg
Dicalcium Phosphate, Anhydrous, Powder	Macron Fine Chemicals®	USP, FCC	No	R	MK4264	12 kg 100 lb
Isopropyl Alcohol	Macron Fine Chemicals®	USP	No	R	MK3031	4 L 350 lb
Lactose Monohydrate, Powder	J.T.Baker®	NF	No	R	JT2249	500 g 12 kg
Lactose Monohydrate, Powder	J.T.Baker®	NF, Multi-Compendial	Yes	R	JT2250	2.5 kg 12 kg
Magnesium Oxide	Macron Fine Chemicals®	USP	No	R	MK6018	55lb —
Magnesium Oxide	J.T.Baker®	USP, FCC	No	R	JT2480	500 g 2 kg
Mannitol	Macron Fine Chemicals®	USP, EP, BP	Yes	R	MK7781	12 kg —
Mannitol	J.T.Baker®	USP, EP, BP, JP	Yes	R	JT2553	500 g 50 kg
Sodium Chloride, Granular	Macron Fine Chemicals®	USP, FCC	No	R	MK7532	500 g 350 lb
Sodium Chloride, Granular	J.T.Baker®	USP, FCC	No	R	JT3628	500 g 350 lb
Sodium Chloride, Granular	J.T.Baker®	USP, FCC	Yes	R	JT3629	12 kg 100 lb
Sodium Chloride, Granular	Macron Fine Chemicals®	USP, FCC, EP, BP, JP	Yes	R	MK7713	500 g 220 lb
Sodium Chloride, Granular	J.T.Baker®	USP, EP, BP, JP	Yes	R	JT3627	500 g 350 lb
Sodium Chloride, Powder	Macron Fine Chemicals®	USP, EP, BP, JP	Yes	R	MK7540	500 g 100 lb
Sucrose	Macron Fine Chemicals®	NF	Yes	R	MK7724	12 kg —
Sucrose	Macron Fine Chemicals®	NF, EP, BP	Yes	R	MK7723	1 kg 100 lb
Sucrose	VWR Bioprocess Chemicals	NF, BP, JP	Yes	—	VWRB335	100g 50kg
Sucrose, Crystal	J.T.Baker®	NF, Multi-Compendial	Yes	R	JT4074	500 g 90 kg
<b>Solvents</b>						
Acetone	J.T.Baker®	NF, FCC	No	R	JT9008	500 mL 350 lb
Acetone	Macron Fine Chemicals®	NF	No	R	MK2432	500 mL 20 L
<b>Therapeutic Agents</b>						
Calcium Acetate	Macron Fine Chemicals®	USP, EP, BP	No	R	MK2003	50 kg —
Potassium Iodide, Powder	Macron Fine Chemicals®	USP, EP, BP	No	R	MK1115	500 g 50 kg
<b>Therapeutic Agents &amp; Antioxidants</b>						
Ascorbic Acid	Macron Fine Chemicals®	USP	No	R	1852	100 g 500 g
Ascorbic Acid, Very Fine Powder	Macron Fine Chemicals®	USP	No	R	MK8829	500 g —
Ascorbic Acid, Crystalline Powder	J.T.Baker®	USP, FCC	No	R	JT0936	500 g 1 kg
Ascorbic Acid, Fine Granular	J.T.Baker®	USP, FCC	No	R	JT0938	125 g 1 kg
Ascorbic Acid, Fine Powder	J.T.Baker®	USP, FCC	No	R	JT0937	500 g 1 kg
Ascorbic Acid, Fine Powder	J.T.Baker®	USP, EP, BP, JP	No	R	JT0939	500 g 1 kg
<b>Therapeutic Agents &amp; Diluents</b>						
Magnesium Carbonate	Macron Fine Chemicals®	USP, FCC	No	R	MK5942	50 lb —
Magnesium Carbonate, Heavy	Macron Fine Chemicals®	USP, FCC	No	R	MK5946	50 lb —
<b>Therapeutic Agents &amp; Alkalinizing Agents</b>						
Sodium Bicarbonate, Powder	Macron Fine Chemicals®	USP, FCC	No	R	MK7396	500 g 300 lb
Sodium Bicarbonate, Powder	J.T.Baker®	USP, FCC	No	R	JT3509	500 g 100 lb
Sodium Bicarbonate, Powder	Macron Fine Chemicals®	USP, FCC, EP, BP, JP	Yes	R	MK7749	2.5 kg 100 lb
Sodium Bicarbonate, Powder	J.T.Baker®	USP, EP, BP, JP	Yes	R	JT3510	2.5 kg 100 lb

## Avantor® solid dosage form excipients for use in shells & coatings

Product	Brand	Grade	Endotoxin Tested	MOC Code	Cat. No.	Sizes*
<b>Anti-Tacking Agents</b>						
Talc	J.T.Baker®	USP, Multi-Compendial	No	R	JT4100	500 g 100 lb
<b>Plasticizers</b>						
Stearic Acid	Macron Fine Chemicals®	NF, EP, BP, JP	No	R	MK2236	500 g 100 lb
<b>Sweeteners</b>						
Sucrose	VWR Bioprocess Chemicals	NF, BP, JP	Yes	-	VWRB335	100g 50kg

# Avantor® solid dosage form excipients for use in compression

Product	Brand	Grade	Endotoxin Tested	MOC Code	Cat. No.	Sizes*	
<b>Acidifying Agents, Antioxidants, Chelating Agents &amp; Flavor Enhancers</b>							
Citric Acid, Anhydrous, Powder	J.T.Baker®	USP	No	R	JT0122	500 g	200 lb
Citric Acid, Anhydrous, Powder	J.T.Baker®	USP, EP, BP, JP	No	R	JT0127	2.5 kg	12 kg
Citric Acid, Anhydrous	VWR Bioprocess Chemicals	USP, EP, BP, JP	Yes	—	VWRB805	2.5KG	12 KG
Citric Acid Monohydrate, Granular	Macron Fine Chemicals®	USP	No	R	MK0616	500 g	12 kg
Citric Acid Monohydrate, Granular	J.T.Baker®	USP, FCC	Yes	R	JT0119	500 g	110 lb
Citric Acid Monohydrate, Crystalline Powder	J.T.Baker®	USP, FCC	No	R	JT0120	2.5 kg	—
Citric Acid Monohydrate, Granular	Macron Fine Chemicals®	USP, EP, BP	Yes	R	MK7788	2.5 kg	12 kg
Citric Acid Monohydrate, Granular	J.T.Baker®	USP, EP, BP, JP	No	R	JT0115	500 g	50 kg
Citric Acid Monohydrate, Granular	J.T.Baker®	USP, EP, BP, JP	Yes	R	JT0116	12 kg	—
Citric Acid Monohydrate	VWR Bioprocess Chemicals	USP, EP, BP, JP	Yes	—	VWRB908	500g	50kg
<b>Acidifying Agents, Sequestering Agents &amp; Flavoring Agents</b>							
Tartaric Acid, Granular	Macron Fine Chemicals®	NF, FCC	No	R	MK2307	500 g	50 kg
Tartaric Acid, Granular	J.T.Baker®	NF, FCC	No	R	JT4104	500 g	—
Tartaric Acid, Granular	J.T.Baker®	NF, EP, BP, JP	Yes	R	JT4105	2.5 kg	—
<b>Buffering Agents</b>							
L-Tartaric Acid	VWR Bioprocess Chemicals	NF, EP, BP, JP	Yes	—	VWRB501	500g	50kg
<b>Disintegration Accelerators</b>							
Dextrose, Anhydrous	J.T.Baker®	USP	Yes	R	JT1919	500 g	200 lb
Dextrose, Anhydrous	J.T.Baker®	USP, EP, BP, JP	Yes	R	JT1920	2.5 kg	200 lb
Dextrose, Anhydrous	VWR Bioprocess Chemicals	USP, EP, BP, JP	Yes	—	VWRBK876	1kg	200lb
Glycine	J.T.Baker®	USP, FCC	No	R	JT0581	500 g	12 kg
Glycine	J.T.Baker®	USP, EP, BP, JP	No	R	JT0582	500 g	50 kg
<b>Fillers &amp; Salts</b>							
Calcium Chloride Dihydrate	VWR Bioprocess Chemicals	USP, EP, BP, JP	Yes	—	VWRB556	1kg	12kg
Sodium Chloride	VWR Bioprocess Chemicals	USP, EP, BP, JP	Yes	—	VWRB241	1kg	350lb
<b>Glidants</b>							
Calcium Phosphate Tribasic	Macron Fine Chemicals®	NF, FCC	No	R	MK4280	500 g	100 lb
Magnesium Oxide	Macron Fine Chemicals®	USP	No	R	MK6018	55 lb	—
Magnesium Oxide	J.T.Baker®	USP, FCC	No	R	JT2480	500 g	2 kg
Talc	J.T.Baker®	USP, Multicompendial	No	R	JT4100	500 g	100 lb
<b>Lubricants</b>							
Magnesium Stearate	Macron Fine Chemicals®	NF, EP, BP, JP	No	R	MK5712	2.5 kg	40 kg
Magnesium Stearate	Macron Fine Chemicals®	NF, EP, BP, JP	No	R	MK2257	2.5 kg	40 kg
Stearic Acid	Macron Fine Chemicals®	NF, EP, BP, JP	No	R	MK2236	500 g	100 lb
<b>Surfactants</b>							
Dextrose, Anhydrous	J.T.Baker®	USP	Yes	R	JT1919	500 g	200 lb
Dextrose, Anhydrous	J.T.Baker®	USP, EP, BP, JP	Yes	R	JT1920	2.5 kg	200 lb
Dextrose, Anhydrous	VWR Bioprocess Chemicals	USP, EP, BP, JP	Yes	—	VWRBK876	1kg	200lb
Polysorbate 20	J.T.Baker®	NF, EP, BP, JP	Yes	R	JT4116	20 mL	19 L
Polysorbate 20, Super Refined	J.T.Baker®	HPLE, Multicompendial	Yes	R	JT4600	200 mL	4 L
Polysorbate 80	J.T.Baker®	NF, EP, BP, JP	Yes	R	JT4117	20 mL	19 L
Polysorbate 80, Super Refined	J.T.Baker®	NF, EP, BP, JP	Yes	R	JT4500	200 mL	4 L
<b>Suspending Agents</b>							
Polysorbate 20	J.T.Baker®	NF, EP, BP, JP	Yes	R	JT4116	20 mL	19 L
Polysorbate 20, Super Refined	J.T.Baker®	HPLE, Multi-Compendial	Yes	R	JT4600	200 mL	4 L
Polysorbate 80, Super Refined	J.T.Baker®	NF, EP, BP, JP	Yes	R	JT4500	200 mL	4 L
<b>Sweeteners</b>							
Dextrose, Anhydrous, Granular	Macron Fine Chemicals®	USP	Yes	R	MK4908	2.5 kg	100 lb
Dextrose, Anhydrous, Granular	Macron Fine Chemicals®	USP, EP, BP, JP	Yes	R	MK7730	2.5 kg	12 kg
Dextrose, Anhydrous	VWR Bioprocess Chemicals	USP, EP, BP, JP	Yes	—	VWRBK876	1kg	200lb
Dextrose, Monohydrate, Powder	J.T.Baker®	USP, Multi-Compendial	Yes	R	JT1913	5 kg	12 kg
Sucrose	Macron Fine Chemicals®	NF	Yes	R	MK7724	12 kg	—
Sucrose	Macron Fine Chemicals®	NF, EP, BP	Yes	R	MK7723	1 kg	100 lb
Sucrose, Crystal	J.T.Baker®	NF, Multi-Compendial	Yes	R	JT4074	500 g	90 kg



## Avantor® soft gelatin capsule dosage form excipients for use in shells & fill

Product	Brand	Grade	Endotoxin Tested	MOC Code	Cat. No.	Sizes*	
<b>Antioxidants</b>							
Sodium Metabisulfite, Granular	Macron Fine Chemicals®	NF, FCC	No	R	MK7776	2.5 kg	400 lb
Sodium Metabisulfite	J.T.Baker®	NF, EP, BP, JP	No	R	JT3551	2.5 kg	—
<b>Chelating Agents</b>							
Edetate Disodium	Macron Fine Chemicals®	USP	Yes	R	MK1395	500 g	100 lb
Edetate Disodium	J.T.Baker®	USP	No	R	JT8994	500 g	100 lb
Edetate Disodium	Macron Fine Chemicals®	USP, FCC, BP, EP	No	R	MK7727	500 g	12 kg
Edetate Disodium	J.T.Baker®	USP, BP, EP, JP	Yes	R	JT8995	12 kg	100 lb
<b>Plasticizers</b>							
Glycerin	J.T.Baker®	USP	Yes	R	JT2142	500 mL	550 lb
Glycerin	J.T.Baker®	USP, FCC	No	R	JT2140	500 mL	550 lb
Glycerin	J.T.Baker®	USP, BP, EP, JP	No	R	JT2143	500 mL	2200 lb
Propylene Glycol	Macron Fine Chemicals®	USP, FCC	No	R	MK6263	20 L	—
Propylene Glycol	J.T.Baker®	USP, FCC	Yes	R	JT9402	500 mL	480 lb
Propylene Glycol	J.T.Baker®	USP, BP, EP, JP	Yes	R	JT9403	500 mL	480 lb
Sorbitol	J.T.Baker®	NF, BP, EP, JP	Yes	R	JT3449	5 kg	50 kg
<b>Preservatives</b>							
Methyl Paraben	Macron Fine Chemicals®	NF, FCC, BP, EP, JP	No	R	MK6215	5 kg	25 kg
Propyl Paraben	Macron Fine Chemicals®	NF, FCC, BP, EP, JP	No	R	MK7624	5 kg	25 kg
Sodium Benzoate	Macron Fine Chemicals®	NF, FCC	No	R	MK0168	2.5 kg	—
Sodium Benzoate	J.T.Baker®	NF, FCC	No	R	JT3500	500 g	2.5 kg
Sodium Benzoate	J.T.Baker®	NF, BP, EP	No	R	JT3501	2.5 kg	55 lb
<b>Sweeteners</b>							
Dextrose, Anhydrous	J.T.Baker®	USP	Yes	R	JT1919	500 g	200 lb
Dextrose, Anhydrous, Granular	Macron Fine Chemicals®	USP	Yes	R	MK4908	2.5 kg	100 lb
Dextrose, Anhydrous	Macron Fine Chemicals®	USP, EP, BP, JP	Yes	R	MK7730	2.5 kg	12 kg
Dextrose, Anhydrous	J.T.Baker®	USP, EP, BP, JP	Yes	R	JT1920	2.5 kg	200 lb
Dextrose, Anhydrous	VWR Bioprocess Chemicals	USP, EP, BP, JP	Yes	—	VWRBK876	1kg	200lb
Dextrose Monohydrate, Powder	J.T.Baker®	USP, Multi-Compendial	Yes	R	JT1913	5 kg	12 kg
Sucrose	Macron Fine Chemicals®	NF	Yes	R	MK7724	12 kg	—
Sucrose	Macron Fine Chemicals®	NF, EP, BP	Yes	R	MK7723	1 kg	100 lb
Sucrose	VWR Bioprocess Chemicals	NF, BP, JP	Yes	—	VWRB335	100g	50kg
Sucrose, Crystal	J.T.Baker®	NF, Multi-Compendial	Yes	R	JT4074	500 g	90 kg



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