

# J.T.Baker® brand Direct Dispense packaging system



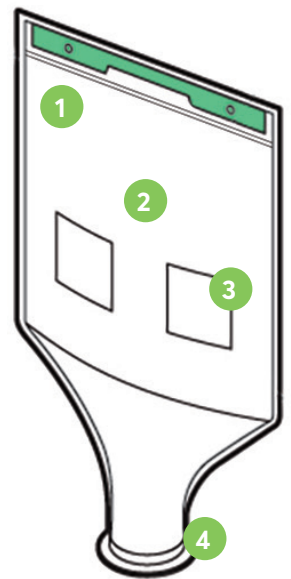
Deliver performance materials directly to your process with Avantor's proprietary powder packaging system

Enhance the effectiveness of your products and streamline your biopharmaceutical manufacturing processes with the J.T.Baker® Direct Dispense packaging system.

- Controlled delivery of salts, buffers and cell culture supplements into your process
- Reduce time-consuming de-clumping and subdivision steps; products are pre-weighed to your specifications with a dispense tolerance of 1%
- Compatible with traditional and single-use manufacturing equipment; simply attach packaging to vessel port, dispense material and dispose of the bag
- Choose from a range of sizes: 30L (250 g – 15 kg capacity); 65L (15 kg – 90 kg capacity); 121L (50 kg – 140 kg capacity); 150L (50 kg – 150 kg capacity)
- Compatible with near-IR testing, which eliminates the need to sample material for identification testing
- Convenient snap cap allows for fast installation and removal
- Tamper-evident clip that doesn't need to be removed until material is ready to dispense, allowing you to reduce the risk of cross-contamination and preserve a closed system

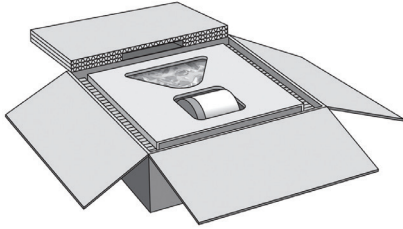
- 1 Inner Tyvek® layer
- 2 Desiccant packs fitted between Tyvek® layer and outer PE layer
- 3 2 packets of molecular sieve desiccant (8 units total)
- 4 4" TC ferrule

Tyvek is a trademark of E.I. du Pont de Nemours and Company or its affiliates.



The J.T.Baker® brand Direct Dispense packaging system helps streamline your processes, whether you're using traditional or single-use manufacturing equipment.

## 30 L packaging features and benefits



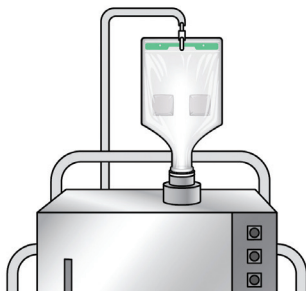
### OUTER PACKAGING

- Stackable/recyclable outer cardboard packaging
- Tailgate sample in the box can be accommodated if requested
- Packaged within foil bag for added moisture barrier during transportation



### DIRECT DISPENSE BAG

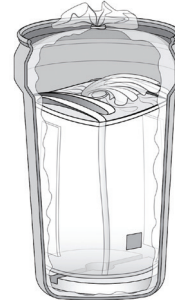
- Ergonomic alternative for up to 15 kg pre-weights
- Tamper-evident seal
- Reduce non-conformities and de-clumping efforts with better flowing materials



### FITS TO EXISTING EQUIPMENT

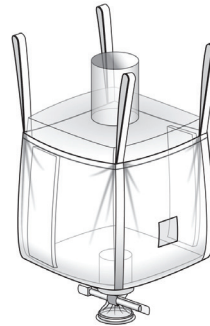
- Easy to use: Simply attach to any port on a reactor, dispense material and dispose of the bag
- Fits current equipment
- 4" bag port can be adjusted to a different size

## 65 L packaging features and benefits



### OUTER PACKAGING

- Packaged in standard 45 gal. drum
- Materials of construction for inner bag are visible from top and compatible with Raman ID testing



### DIRECT DISPENSE BAG

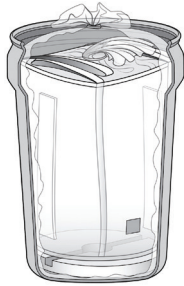
- Desiccant contained within built-in pockets
- Tamper-evident seal
- Window to visually confirm material dispense
- Improved flow of materials, pre-weighed and ready to dispense



### FITS TO EXISTING EQUIPMENT

- Compatible with conventional handling systems
- 4" bag port can be adjusted to a different size or easily clamped onto a bioreactor

## 121 L packaging features and benefits



### OUTER PACKAGING

- Packaged in standard 55 gal. drum
- Materials of construction for inner bag are visible from top and compatible with Raman ID testing



### DIRECT DISPENSE BAG

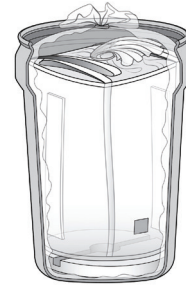
- No change in contact layer from current packaging with any Direct Dispense bag
- Tamper-evident seal
- Window to visually confirm material dispenses



### FITS TO EXISTING EQUIPMENT

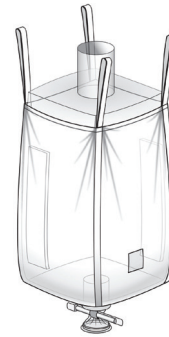
- Compatible with conventional handling systems
- Bag port can be adjusted to a different size or easily clamped onto a bioreactor
- Available in 4", 6", and 8" port sizes

## 150 L packaging features and benefits



### OUTER PACKAGING

- Packaged in standard 55 gal. drum
- Materials of construction for inner bag are visible from top and compatible with Raman ID testing



### DIRECT DISPENSE BAG

- Tamper-evident seal
- Window to visually confirm material dispenses



### FITS TO EXISTING EQUIPMENT

- Compatible with conventional handling systems
- 8" bag port can be adjusted to different size or easily clamped onto a bioreactor

## J.T.Baker® Direct Dispense packaging system product offering and maximum capacity

Material	30L Bag Max kg/Bag	65L Bag Max kg/Bag	121L Bag Max kg/Bag	150L Bag Max kg/Bag
Ammonium Sulfate	15	65	115	140
L-Arginine HCl	15	34	61	74
L-Asparagine	15	34	61	74
Citric Acid, Anhydrous	10	22	40	48
Citric Acid Monohydrate	15	55	98	119
Galactose	15	33	58	70
Glucose (a.k.a. Dextrose)	15	54	95	116
L-Glutamine	15	42	74	90
Guanidine Hydrochloride	15	75	133	150
L-Histidine HCl	15	55	97	118
Mannitol	15	33	58	70
Potassium Chloride	15	65	115	140
Potassium Nitrate	15	52	92	112
Potassium Phosphate Dibasic	15	70	124	150
Potassium Phosphate MonoBasic	15	70	124	150
Sodium Acetate Anhydrous	15	43	76	92
Sodium Bicarbonate	15	63	111	135
Sodium Carbonate Monohydrate	15	59	104	126
Sodium Chloride	15	79	139	150
Sodium Hydroxide, Pellet	15	65	115	139
Sorbitol	11	24	43	52
Sucrose (Beet)	15	53	94	115
Sucrose (Cane)	15	53	94	115
Trehalose	15	62	110	134
Tris Base	15	49	87	106
Tris Hydrochloride	15	49	86	105
Tyrosine Disodium	15	54	96	117
Urea	15	53	94	115

Examples of packaging capabilities for some products; packaging capabilities determined by bulk density.

Material offering may vary. Any powder material can be considered for use in the J.T.Baker® direct dispense packaging system. Please consult your Avantor account manager to learn more.