

# PDMPak<sup>®</sup> Bottle System for Pressurized Applications

*Liner-based bottle system for  
critical material delivery*

The PDMPak<sup>®</sup> system for pressurized applications is a leading containment and dispense system that helps ensure that chemicals are protected throughout the filling, shipping and dispensing operations. The system includes a container which consists of a flexible liner inside a rigid overpack, a package closure and a dispense connector.

## APPLICATIONS

- PDMPak systems are designed for applications that require indirect pressurization during the dispense process. Pressure delivery gas flows through the dispense connector into the region between the bottle and the liner, causing compression, collapsing the liner and delivering chemical.

## FEATURES & BENEFITS

- Designed to meet rigorous chemical input pressure requirements
- Makes pumps more efficient by maintaining positive pressure to the inlet of the pump
- Shatter-resistant bottle helps improve safety
- Indirect pressure with its sealed delivery system ensures safe chemical delivery and helps prevent external contamination
- Liner-based system maximizes chemical utilization



*PDMPak system for pressurized applications with SmartCap™ closure*

## SPECIFICATIONS

<b>Rated capacity</b>	PK-01-A4-T420-1      1-liter PK-04-A4-T420-1      4-liter
	DO NOT overfill. There is a designed overhead capacity to accommodate the dispense system. The actual capacity should be used when filling the PDMPak to avoid process problems and potential overflows.
<b>Nominal weight of assembly (including temporary cap*)</b>	1-liter      0.29 kg (0.63 lb) 4-liter      0.76 kg (1.68 lb)
<b>UV protection</b>	Less than 0.1% light transmittance at 190–400 nm wavelength
<b>United Nations classification</b>	A combination package with Entegris specified shipping box (Certified UN4G/Y: 4-liter size only)
<b>Overpack neck thread type</b>	Modified 63 mm buttress thread; 4.24 mm (0.167") pitch
<b>Pressure dispense rating</b>	The PDMPak is a pressure rated vessel. Maximum operating pressure: 1 atm gauge pressure (14.7 psig, 101.4 kPa)
<b>Country of manufacture</b>	USA
<b>Materials of construction</b>	Overpack      Blow molded HDPE Chime      Injection molded HDPE Liner      PTFE film Fitment      Injection molded natural virgin PFA Retainer      Injection molded natural virgin HDPE Temporary cap      Injection molded LDPE – red pigmented
<b>Manufacturing standards</b>	Fabricated and tested in a Class 5 Cleanroom as per International Standard ISO 14644-1:1999 Cleanrooms and associated controlled environments – Part 1: Classification of air cleanliness. Film and seal defect detection      Light table visual inspection Liner leak detection**      Pressure decay tested Liner integrity verification***      Pressurized burst tested Weld tensile strength tested Particle count verification      Particle tested with ultrapure DI water
<b>Cleanliness</b>	PDMPak contains a particle-certified liner. Product is not to exceed 55 particles per mL at $\geq 80$ nm in ultrapure DI water. Product is not to exceed 20 particles per mL at $\geq 100$ nm in ultrapure DI water. Product is not to exceed 10 particles per mL at $\geq 150$ nm in ultrapure DI water. A Certificate of Analysis stating lot-specific particle count data is available for each shipment of product.
<b>Extractable trace elements</b>	Product is not to exceed 2 ppb (parts per billion) total of extractable trace elements listed utilizing 5% Nitric acid. Trace elements reported are: Ag, Al, As, B, Ba, Bi, Ca, Cd, Co, Cr, Cu, Fe, In, K, Li, Mg, Mn, Na, Ni, Pb, Si, Sn, Sr, Ti, V, W, and Zn. A Certificate of Analysis stating lot-specific trace element data is available for each shipment of product.

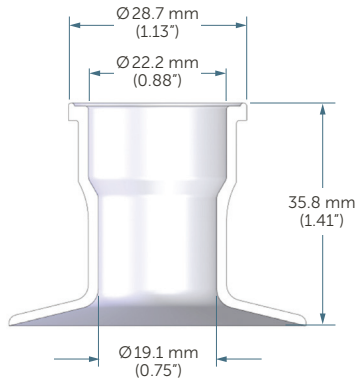
\*A temporary cap weighs 7 g (0.007 kg)

\*\*Detection = every liner

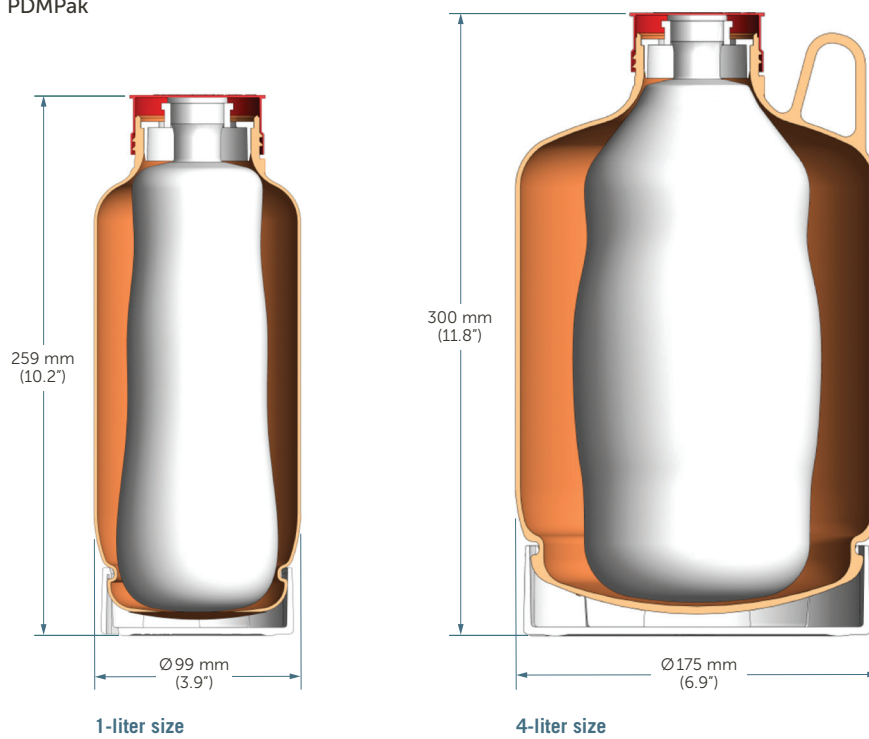
\*\*\*Verification = statistical sampling

## DIMENSIONS

### Fitment



### PDMPak



Note: Unless otherwise indicated, all dimensions are nominal.

Item	Description	Quantity
1	Temporary cap	1
2	Liner	1
3	Fitment	1
4	Retainer	1
5	Overpack	1
6	Chime	1

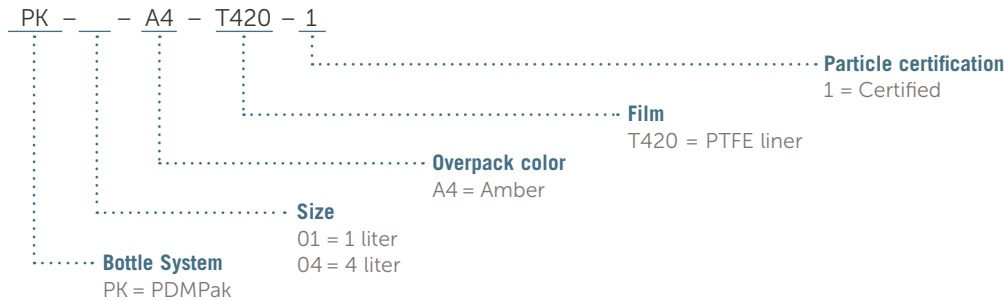
## SHIPPING INFORMATION

<b>Labeling</b>	A liner barcode label showing the assembly part number, bottling batch number, and liner lot number is applied to the bottom surface of the overpack. The outer shipping box is labeled with part number, product description, bottle batch number, liner lot number(s), quantity and date of manufacture.
<b>Packaging</b>	PDMPak bottles are double-wrapped in a polyethylene bag and closed with a cable tie. The double-wrapped PDMPak bottles are placed into a shipping box made of corrugated fiberboard.

Part number	Size	Box quantity (minimum order quantity)	Skid quantity (economic order quantity)	Box dimensions (L x W x H)
PK-01-A4-T420-1	1 L	30	450 (15 boxes of 30)	851 mm x 343 mm x 324 mm (33.5" x 13.5" x 12.8")
PK-04-A4-T420-1	4 L	6	150 (25 boxes of 6)	660 mm x 457 mm x 356 mm (26" x 18" x 14")

## ORDERING INFORMATION

PDMPak Bottle System for Pressurized Applications: part number



### PDMPak bottle system accessories

Part number	Description
NCD-AA-AA	Dispense closure
SC-XX-YY-ZZ	SC type SmartCap with customer-specific key-code*
SCD-XX-YY-ZZ	SCD type SmartCap with customer-specific key-code*
SCG-XX-YY-ZZ	SCG type SmartCap with customer-specific key-code*
NA-51-A-XXYYZZ	Torque tool for SmartCap with keyed insert. Contains NA-51 torque tool body and NA-51-XXYYZZ keyed insert. NA-51 and NA-51-XXYYZZ are also available for purchase separately.
NA-47	Tear tab removal tool
NA-33	Torque wrench, 3/8", 0-150 lbf•in
NA-42	Torque tool adapter, SmartCap

\*Contact Entegris to obtain customer-specific key-code.

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