

B BRAUN
SHARING EXPERTISE

## APEX® – The Peak of Performance

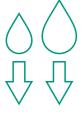
### Compounding without compromise

When a life depends on less than a milliliter of a medication, there's no room for human error. B. Braun designed the APEX® Compounding System for your most critical needs in mind.

With no room for compromise: speed and accuracy, ease of use and efficiency, macro and micro — with APEX® you have it all.

Elevate your compounding with APEX®.





Dual-drive filling technology



26-lead, preassembled, transfer sets



Colorcoded, numbered, barcoded



Wireless barcode scanner



Large display screen (16")



Manual addition tracking and verification

### **APEX**®

### Compounding without compromise



#### Efficiency made easy

Every day, patient lives depend on critical nutrition, so APEX® makes every second count. By automating the complete process from pumping to manual add verification, APEX® was designed to improve efficiency in your pharmacy every step of the way.

- Reduces manual additions by using 26 ports capable of dispensing low volumes
- Using dual-drive filling technology for concurrent delivery of macro and micro ingredients, APEX® is designed to accelerate compounding completion
- Accelerates dispensing with 7 flex lines that allow the prescribed volume to be delivered via micro or macro line channel



### Simple: From setup to cleanup

APEX® was developed to work with you by people who understand the challenges you face in the pharmacy. Understanding the complexity of ordering and compounding customized parenteral nutrition, APEX® was designed to:

- Guide preparation for compounding with Setup Wizard
- Help you intuitively navigate the software using Windows®-based program drop-down menus
- Increase readability and usability with its large conrtol panel
- Minimize down time with its built-in training and on-screen multimedia assistance
- Provide easy setup through its preassembled transfer set packaging
- Aid log-in and approval with barcoded user badges

## Safety for your patients and protection for your pharmacy

As with all B. Braun products, APEX® was inspired by patient safety and built with your needs in mind. With verifications every step of the way, your pharmacy and patients are protected from start to finish.

- Solution verification and automated programming with barcode scanner
- Preassembled, color coordinated, numbered and barcoded transfer set design eliminates the possibility of transposing solution lines and reduces the risk of touch contamination
- Tracks manual additions and verifies dispensing



### Precision in every detail

Many people are depending on your precision. APEX® is designed to automatically calculate and mix complex solutions with up to 26 unique ingredients. So even in the fast-paced world of pharmacy, you'll still see improved accuracy from high volumes to micro additions.

- Gravimetric verification following volumetric delivery
- 26 ports maximize the number of ingredients that can be automatically delivered
- Dual-drive filling technology for precise macro and micro delivery



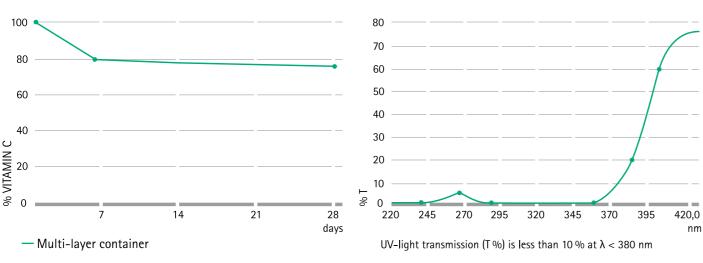
# Disposable Portfolio Overview

### **Multi-layer Mixing Container**

Multi-layer Mixing Containers are composed of a special multi-layer barrier film made out EVA / EVOH (ethylene vinyl alcohol) / EVA providing an excellent oxygen barrier. These containers were developed to protect oxygen-sensitive nutrients as vitamins from oxidation. They may be stored for an extended period because of reduced transmission of UV light.

Fig. 2 | Multi-layer container – UV transmission

Fig. 1 | Multi-layer container – Ascorbic Acid (Vitamin C) concentrations in TPN bags



**References** | Test Report (TR2021-005) UV transmission analysis for TPN bags, B. Braun Avitum | Test Report (No. E0807-1-091712) Vitamin stability in TPN regimens stored in Nutrimix® Barrier (Multi-layer container) bags, Ecotox.

#### **Portfolio Overview**

Product	Description	Size	Code no. (REF)	
	Multi-layer Mixing Container, designed to provide an excellent oxygen barrier and reduced transmission of UV light for less degradation and longer storage time.			
	Multi-layer Mixing Container	250 ml	2112596	
6. Supplicação 200 10. Supplicação 200 10. Superior 200 10. Superior 200 10. Superior 200	Multi-layer Mixing Container	500 ml	2112597	
= == (	Multi-layer Mixing Container	1,000 ml	2112598	
The second	Multi-layer Mixing Container	2,000 ml	2112599	
	Multi-layer Mixing Container	3,000 ml	2112600	
	Multi-layer Mixing Container	4,000 ml	2112601	

Product	Description	Size	Code no. (REF)		
	26-Lead, Preassembled Transfer Sets preassembled, barcoded transfer sets are designed to: eliminate the possibility of transposing solution lines reduce the risk of touch contamination facilitate and accelerate the set-up				
	Transfer Set with 26 Lines	n/a	2112650		
	Transfer Set Spikes & Fluid Dispensing Connectors designed to facilitate fluid transfer from source containers:				
•	Mini-Spike®	n/a	412012		
	Universal Spike 5-pack	n/a	2112603		
	Universal Spike Single Pack	n/a	2112604		
*	Fluid Dispensing Connector	n/a	415080		
	EVA Mixing Container, designed for safety and durability.				
S. Di Mang Conserve 20	EVA Mixing Container	250 ml	2112587		
The Company Name of the Co	EVA Mixing Container	500 ml	2112588		
SECTION OF STREET, MANUAL PROPERTY OF STREET, MA	EVA Mixing Container	1,000 ml	2112589		
CHEEL O	EVA Mixing Container	2,000 ml	2112590		
	EVA Mixing Container	3,000 ml	2112591		
Ÿ	EVA Mixing Container	4,000 ml	2112592		
	Calibration Container	2,000 ml	2112602		
The street of th	EVA Dual Chamber Mixing Container, designed to be safe and effective.				
20 m	EVA Dual Chamber Mixing Container	1,500 ml	2112593		
1	EVA Dual Chamber Mixing Container	3,000 ml	2112594		
	EVA Dual Chamber Mixing Container	4,000 ml	2112595		

# **Specifications**

The APEX® Compounding System is a comprehensive solution to a pharmacy's everyday and emergency needs, with macro and micro compounding in one machine. We know that each dose, each solution and every patient's life is as important as the next.

Contact your B. Braun representative today to schedule a demonstration on how APEX® can make your pharmacy even more efficient.

	Dimensions and weight	Performance
Power		100-240 V AC, 50-60Hz, 120 Watts
Control Panel	39 x 24 x 5 cm (15 x 9 x 2 in) 5 kg (11 lbs)	-
Pump Module and Load Cell (vertical configuration)	76 x 38 x 42 cm (30 x 15 x 17 in) 25 kg (55 lbs)	-
Pump Module and Load Cell (horizontal configuration)	81 x 36 x 42 cm (32 x 14 x 17 in) 25 kg (55 lbs)	-
Water Flow Rate	-	Up to 1 l in less than a minute
Repeatable Accuracy	-	$\pm$ 10 % or 0.03 ml, whichever is less at $\leq$ 1 ml and $\geq$ 0.2 ml $\pm$ 3 % at $>$ 1 ml $^*$ see below
Minimum Dispensing Volume	-	0.2 ml in increments of 0.01 ml
Maximum Number of Ingredients	-	26
Operating Temperature	-	15° C to 30° C (59 - 86° F)
Storage Temperature	-	-5° C to 60° C (23 - 140° F)
Noise	-	Airborne noise emissions do not exceed 70dB(A)

<sup>\*</sup> Repeatable accuracy for dextrose is  $\pm$  10% or 0.03 ml, whichever is less at  $\leq$  1 ml and  $\geq$  0.2 ml;  $\pm$  6% at greater than 1 ml.