

**Product: Crystalair™ Compression Packs**

<u>Name</u>	<u>Item #</u>	<u>Nominal I. D. Size</u>
Mini	40-50-010106	1.125" X 1.125" X 0.625"

**Description and Uses:**

Crystalair (Mini) Compression Packs are rigid two piece transparent packs. Each top and each bottom contains a ring with a clear conformable elastomeric membrane. When the halves are closed together, fragile product contents are gently protected, fully visible and are provided protection from abrasion, shock and vibration. This new design was specifically developed with the removable ring/membrane assemblies to allow membrane removal for cleaning, replacement and/or desiccant pack placement.

**Composition and Structure:**

The shell of each Crystalair Compression Pack is made of an injection molded resin.

The rings are made of an injection molded resin.

The membranes are made of a 3 Mil thick proprietary film.

**Serviceability:**

Crystalair Compression Packs can be utilized in environments with temps ranging from -65° to +200° F. Out gassing and deterioration of the physical integrity of the membranes, rings and cases will not occur in this normal temperature service range.

Sterilization can be accomplished by Gamma, ETO or Electron Beam processing without loss of physical product protection or package breakdown. Depending on the method selected, minor visible color shifts may occur in the rings and membranes.

The ring assemblies can be removed for cleaning or installing desiccant packages.

**Product put-ups (sizes in Inches):**

<u>Part#</u>	<u>I.D. (Usable Surface Area)</u>	<u>O. D. (outer Dimensions)</u>	<u>Qty/case</u>
40-50-010106	1.125" X 1.125" X 0.625"	1.75" X 1.75" X 0.75"	200

**Custom options:**

- Crystalair Compression Packs can be engraved, printed or labeled.
- The cases can be molded from other resins, with tints or colors and/or with other transparency or opacity levels.
- The packs can be supplied by the case with each pack individually cleaned to clean room 100 level and double vacuum bagged.
- Special additives and/or treatments can be incorporated for static free packs.

Contact your ADE, Inc. representative to discuss these and other custom options.

**ISO Status:**

Crystalair Compression Packs are produced according to a documented quality system that is certified as compliant with the ISO 9001 quality standard.

### Performance Levels

<b>Property</b>	<b>ASTM Method</b>	<b>Typical Results</b>
<b><u>Case Halves</u></b>		
Specific Gravity	D 892	1.05 gr./cc
Tensile Strength @ failure	D 638	6,200 psi
Tensile Modulus	D 638	420,000 psi
Elongation @ failure	D 638	1 %
Rockwell Hardness	D 785	71 L scale
Notched Izod Strength, 1/8"	D 256	.3 ftlbs/inch
Deflection Temperature	D 648	190° F
Vicat Softening Point	D 1525	208° F
<b><u>Rings</u></b>		
Specific Gravity	D 792	1.20 gr./cc
Tensile Yield	D 636	12,000 psi
Elongation @ Yield	D 636	9 %
Notched Izod @ 73° F	D 258	2.0
Notched Izod @ -40° F	D 258	1.1
Deflection Temp.	D 648	270° F
Vicat Softening Point	D 1525	297° F
<b><u>3.0 Mil Film Membranes</u></b>		
Specific Gravity	D 792	1.12 gr./cc
Durometer (Hardness)	D 2240	85A +/- 5
Thermal Properties		
Serviceable Temperature Range		-65 to 185° F
Melting Point Range		345° to 385° F
Tensile Properties (3.0 Mil)	D 638	
Modulus @ 100% Strain		1,800 psi
Modulus @ 300% Strain		3,500 psi
Modulus @ Break		10,000 psi
Elongation @ Break		475 %
Set @ Break		20 %
Tear Properties	D 624	
Die C		580 pli
Outgassing Information		
@ 248° F and above the heat and U. V. Additives Volatilize.		
@ 302° F and above any residual monomers may volitalize.		