

Resin Composition

70% Polystyrene/30% Polyethylene

Average particle size

98% between 0.8 – 1.7 mm (0.03 and 0.07 in)

Color

Natural (white)

Shape

Spherical

Average VOC Content

8.5%

Safety

Provide adequate exhaust ventilation during resin and prepuff storage and processing as recommended in the Safety Guide for ARCEL resin to avoid the hazardous accumulation of the pentane blowing agent.

Raw Bead Storage

Store unexpanded product below 4°C (40°F) until processed to avoid loss of expandability and potential hazardous accumulation of pentane vapor.

Expansion

ARCEL 730 LV resin can be continuously or batch expanded using conventional EPS expansion equipment. Some minor material handling modifications may be

required. For molded part densities below 32 g/L (2.0 pcf), double-pass expansion will be required to attain desired bulk densities. ARCEL resin has been expanded in continuous expanders ranging in size from 210 to 1,135 liters (55 to 300 gallons) as well as several sizes of batch expanders. Minimum ideal density potential is expected to be:

Nominal Aged Density Expectation	g/L (pcf)
Single Pass Expansion	32.0 (2.0)
Double Pass Expansion	27.2 (1.7)
Batch Expansion	28.8 (1.8)

Freshly expanded ARCEL resin is sensitive to the thermal/mechanical shock of an airveyor. Improper conveyance may significantly increase density.

Molding

ARCEL resin is relatively easy to mold. Expanded particles have an indefinite shelf life. Conventional EPS fill guns as small as 15mm can be used. Successful fill is always contingent upon part/ tooling design, fill gun placement as well as mold geometry.

Minimum recommended wall thickness is 1.3 cm (0.50 inches), again depending on design complexity and fill gun placement.