TECHNICAL DATASHEET:
HYPUR-CEL® R2035T Open Cell Polyurethane Foam

PRODUCT DESCRIPTION

HyPUR-cel® R2035T is a high-resilience open cell polyurethane foam in the HyPUR-cel® R-series with a typical density of 20 pcf (18–24 pcf tolerance) and a 25% Compression Deflection of 35 psi (30–40 psi tolerance) per ASTM D1056. It delivers 56% resilience per ASTM D2632 together with 220 psi tensile strength, 220% elongation and 40 lb./in tear strength. The material operates across a service temperature range of -40°F to 250°F and is engineered for stable energy return, low hysteresis loss and excellent stress relaxation resistance through repeated cyclic compression, making it well suited for firm dynamic seals, bumpers and sporting goods components.

TYPICAL APPLICATIONS

- Dynamic sealing and gasketing requiring consistent force recovery
- Footwear and sporting goods components requiring durable energy return
- Energy return and vibration isolation pads in industrial equipment
- Repeated-deflection bumpers, stops and anti-fatigue components
- Die-cut resilient spacers and cushions in automotive and electronics assemblies

PRODUCT FEATURES & BENEFITS

- Firm 35 psi compression profile with high resilience (56%)
- High tensile (220 psi) and tear strength (40 lb./in) with 220% elongation
- Breathable open cell structure allows air and moisture passage
- Superb compression fatigue properties: elastomeric cell structure maintains integrity through 1M+ cycles at 50% compression
- Excellent stress relaxation resistance maintains sealing force over time
- Low hysteresis loss for efficient energy return in dynamic applications
- Dimensionally stable across a wide service temperature range (-40°F to 250°F)
- Available with adhesives, laminated films, fabrics and custom coatings

TECHNICAL DATA

TECHNICAL DATA	TYPICAL VALUE	TOLERANCE	TEST METHOD
Density	20 pcf	18 – 24 pcf	ASTM D3574
Compression Deflection 25%	35 psi	30 – 40 psi	ASTM D1056
Compression Set 50%	1.5%	3% max	ASTM D1056
25% CFD	20 psi	N/A	ASTM D3574
Tensile Strength	220 psi	N/A	ASTM D3574
Elongation	220%	N/A	ASTM D3574
Tear Strength	40 lb./in	N/A	ASTM D624
Resilience	56%	N/A	ASTM D2632
Service Temperature	-40°F to 250°F	—	—

Notes:

Typical properties as published by Rubberlite Inc. (property sheet issue date 3/19/24). Values are typical and are not to be used as acceptance or rejection criteria. No flammability rating is listed on the current manufacturer sheet.

Availability: Standard 60 inch (1.52 m) wide rolls with capabilities to produce in various widths. Available in 50 feet (15.24 m) and 100 feet (30.48 m) lengths, skived to custom thicknesses. Available with adhesives, laminated fabrics, films, custom coatings or composites. Various color options available with the ability to custom color match using our fully reacted colorants. Other additives, such as anti-microbial and flame retardants, are available depending upon volume.

Source: Rubberlite Inc. HyPUR-cel® R2035T property sheet, issue date 3/19/24. HyPUR-cel® is a registered trademark of Rubberlite Inc.

Specifications are believed to be accurate at the time of publication and are subject to change without notice. It is the responsibility of the end-user to test and determine suitability of this material for a particular application. H-O will provide samples for this purpose at no charge. **REV. 0**