TECHNICAL DATASHEET:
HYPUR-CEL® R2224T Open Cell Polyurethane Foam

PRODUCT DESCRIPTION

HyPUR-cel® R2224T is a high-resilience open cell polyurethane foam in the HyPUR-cel® R-series with a typical density of 22 pcf (19–25 pcf tolerance) and a 25% Compression Deflection of 24 psi (19–29 psi tolerance) per ASTM D1056. It delivers 58% resilience per ASTM D2632 together with 170 psi tensile strength, 250% elongation and 30 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.

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

- Medium-firm 24 psi compression profile with the highest resilience of the 20–22 pcf T grades (58%)
- High tensile (170 psi) and tear strength (30 lb./in) with 250% 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	22 pcf	19 – 25 pcf	ASTM D3574
Compression Deflection 25%	24 psi	19 – 29 psi	ASTM D1056
Compression Set 50%	1.7%	3% max	ASTM D1056
25% CFD	17 psi	N/A	ASTM D3574
Tensile Strength	170 psi	N/A	ASTM D3574
Elongation	250%	N/A	ASTM D3574
Tear Strength	30 lb./in	N/A	ASTM D624
Resilience	58%	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® R2224T 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**