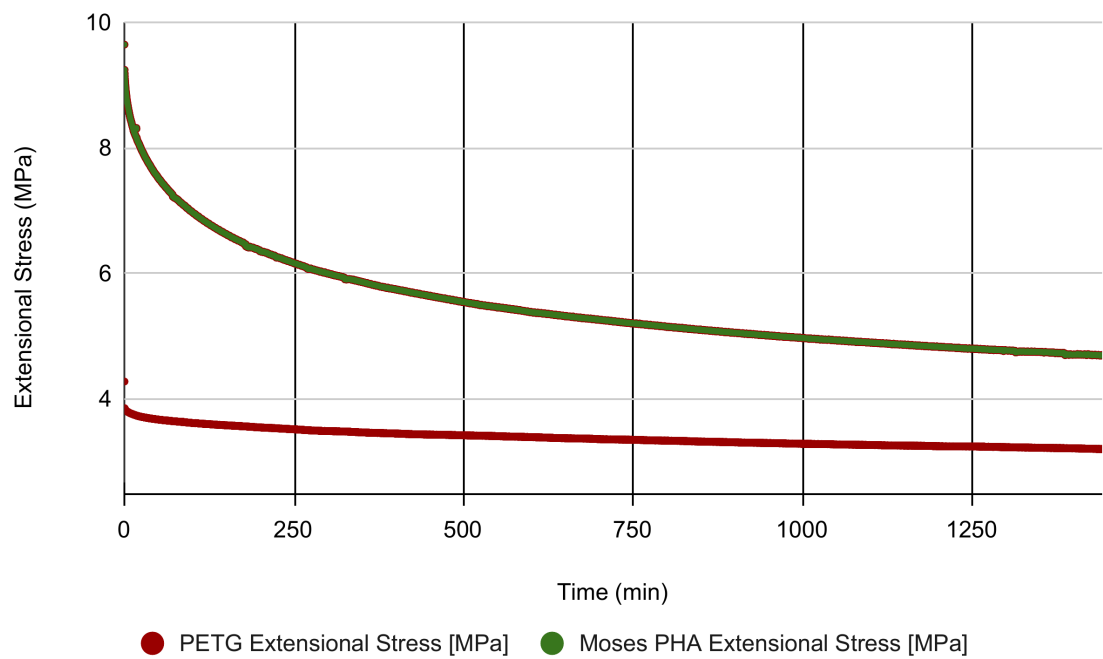


Stress Relaxation: Moses PHA vs PETG

Covalent Material Insights | May 4, 2026 | 3-point bend, 0.2% strain, 24 h at 37 °C

CONFIGURATION	APPLIED STRAIN	DURATION	TEMPERATURE
3-point bend	0.2%, held constant	24 hours	37 °C

STRESS OVER 24 HOURS



STRESS AT KEY TIME POINTS (read from chart)

	Initial	1 hour	8 hours	24 hours	Retained at 24 h
Moses PHA	9.66 MPa	7.41 MPa	5.60 MPa	4.72 MPa	49%
PETG	4.30 MPa	3.68 MPa	3.44 MPa	3.22 MPa	75%

KEY FINDINGS

- Higher force from the start.** At the same 0.2% strain, Moses PHA reached about 2.2x the initial stress of PETG (9.7 vs 4.3 MPa), consistent with a stiffer material.
- Higher force after 24 hours.** Moses PHA still held about 47% more stress than PETG at 24 hours (4.7 vs 3.2 MPa), and stayed above PETG at every point in the test.
- Greater proportional relaxation.** Moses PHA relaxed more in relative terms, retaining about 49% of its initial stress versus about 75% for PETG. Most of its drop occurred in the first few hours, and both curves were flattening by 24 hours.

Testing performed by Covalent Material Insights, May 4, 2026. Values are read from the plotted data and are approximate (about ±0.05 MPa). "Initial" is the first recorded point after strain was applied. Percent retained = stress at 24 h / initial stress. Specimen count, geometry, and conditioning were not specified with the chart.