Checking When a Polymer Stays Bent

Scoring guide · one credit per question · review written work against each rubric

Checking When a Polymer Stays Bent

Question 1

Choice (2)

Under the same load at 45 °C, both strips bend 9 mm. The residual readings describe behavior after unloading.

Question 2

Both bend 9 mm under load. After unloading and returning to the measuring temperature, P has no residual bend and Q keeps 4 mm. The equal loaded bends do not show equal recovery.

Question 3

P meets the requirement with a residual bend of 0 mm. Q retains 4 mm, which exceeds the 1 mm limit.

Question 4

Use two fresh, matched P strips. Hold both at 45 °C under the same force, but apply the load for different lengths of time. Release the load and use the same cooling and waiting procedure. Compare the residual bends at 20 °C.