Given: Container full of blue opals.

Required: Force $P$ required to tip container; minimum coefficient of friction to keep container from sliding.

Solution: Draw FBD. Normal force will be at lower right corner when container starts to tip.

\[ \sum M_{\text{lower right}} = 40\text{lb}(1.5\text{ft}) - P \cos(20^\circ)(4\text{ft}) = 0 \]
Solving, \( P = +15.96 \text{ lb} \). This is force required to tip container.

\[ \sum F_y = N + P \sin(20^\circ) - 40\text{lb} = 0 \]
Solving, \( N = 34.54 \text{ lb} \).

\[ \sum F_x = P \cos(20^\circ) - F = 0 \]
Solving, \( F = 15 \text{ lb} \).

Minimum coefficient of friction: \( \mu_s = \frac{F}{N} = \frac{15\text{lb}}{34.54\text{lb}} = 0.434 \)