

Mold Volume Quick Reference

Calculate net volume, then add 15% waste buffer. Use the Resin Dose Calculator for exact figures.

Shape	Formula	Notes	Worked Example (imperial)
Round / Cylinder	$\pi \times r^2 \times \text{depth}$	$r = \text{diameter} \div 2$	4" diam, 0.25" deep = 1.74 fl oz
Square	$\text{side}^2 \times \text{depth}$	—	4" x 4" x 0.25" $\div 1.80 = 2.22$ fl oz
Rectangle	$\text{length} \times \text{width} \times \text{depth}$	—	10" x 6" x 0.25" $\div 1.80 = 8.33$ fl oz
Oval	$\pi \times a \times b \times \text{depth}$	$a = \text{long}/2, b = \text{short}/2$	10" x 7" x 0.25": 7.64 fl oz
Hemisphere	$(2/3) \times \pi \times r^3$	$r = \text{diameter} \div 2$	4" diam: $(2/3) \times \pi \times 2^3 \div 1.80 = 9.28$ fl oz
Bowl (approx.)	$\pi \times r^2 \times \text{depth} \times 0.6$	60% of cylinder	5" top diam, 2" deep x 0.6 = 6.54 fl oz
Canvas coating	$\text{length} \times \text{width} \times 0.125"$	Standard coat depth	12" x 12" x 0.125" $\div 1.80 = 1.00$ fl oz
River channel	$\text{length} \times \text{width} \times \text{depth}$	Same as rectangle	Pour in 3 stages for depths over 1"

UNIT CONVERSIONS

Cubic inches → fl oz: divide by 1.8047

Cubic cm → ml: divide by 1 (cm³ = ml)

fl oz → ml: multiply by 29.57

Inches → cm: multiply by 2.54

QUICK 15 % WASTE BUFFER REFERENCE

Net Volume	fl oz — Mix this	Net Volume	ml — Mix this
1.0 fl oz	1.15 fl oz	30 ml	34.5 ml
2.0 fl oz	2.30 fl oz	60 ml	69.0 ml
4.0 fl oz	4.60 fl oz	120 ml	138 ml
6.0 fl oz	6.90 fl oz	200 ml	230 ml
8.0 fl oz	9.20 fl oz	300 ml	345 ml
12.0 fl oz	13.80 fl oz	500 ml	575 ml
16.0 fl oz	18.40 fl oz	1000 ml	1150 ml