

## PREMIUM 20OZ INSULATED BOTTLE

PMB20 | PWH20

### Laser Engraving

#### Recommended Equipment

- CO2 Laser Engraver
- Jig to hold bottle
- Optional: Rotary attachment for cylindrical objects
- Degreaser cleaner and rag or sponge

#### Recommended Settings

- Power: 35-50%
- Speed: 70-90%
- Resolution: 500-600 DPI/PPI

#### General Engraving Instructions

- Remove the lid from the bottle and place it in the laser.
  - Tip: Utilize a stationary jig to help hold the bottle level on the laser bed.
  - For best results, use an optional rotary attachment for cylindrical object if available.
- Focus the laser to the surface of the bottle.
  - If using a stationary jig, graphics less than 1.5" width are recommended.
  - Focus the laser just off the top-most curvature of the bottle. When using 2.5" or 3" lenses, set laser focus between 1/4" and 5/8" to the left or right of highest point (center) of the curvature of the bottle. If using smaller focal length lenses, the focus threshold (left to right) may vary.
  - If using a rotary attachment, focus the laser directly on top of the top-most curvature of the bottle.

- Close the laser lid and send the artwork to the laser using the recommended starting settings.
- When finished, open the laser lid and remove the bottle.
- If needed, clean the engraving with a degreaser cleaner and rag or sponge.

## UVLED Printing

### Recommended Equipment

- UVLED printer
- Alcohol and soft cloth
- Adhesion promoter rated for use with metals
- Jig to hold bottle
- Optional: Rotary attachment for cylindrical objects

### General UVLED Printing Instructions

- Remove the lid from the bottle. Wipe the surface down with alcohol and soft cloth to clean off any oils or dirt from the bottle surface.
- If needed, apply a metal adhesion promoter to the bottle surface to increase the UV ink adhesion.
  - CAUTION: Hand wash only with mild dish soap. Do not wash in a dishwasher.
- Place the bottle on the printer bed.
  - Tip: Utilize a stationary jig to help hold the bottle level on the laser bed.
  - For best results, use an optional rotary attachment for cylindrical object if available.
- Focus the print head to the surface of the bottle.
- Place the printer into print-ready position and send job to the printer.
- When finished, remove the bottle from the printer bed.
- Allow 24 hours for the UV ink to fully cure.

