

LaserBond 100 Aerosol Spray Can Instructions

LaserBond 100 is an All Purpose laser bonding material for producing permanent black marks on most surfaces and materials and is ready to use. It is ethanol based which allows for a faster drying time. It can be used on a variety of substrates including glass, ceramic, stone and metals such as stainless steel, brass, aluminum, copper, titanium, tin, nickel and many others. Shake the can well for about one minute before using. For best results, use between 50° and 90° F.

Applying: Clean the substrate surface so it is free of any type of contamination or oils. Hold the can 6" – 8" from the substrate surface and mist the **LaserBond 100** material onto it. It is very important that the **LaserBond 100** material is applied using a side-to-side motion to obtain **a thin, even and smooth coating**. Any variation in the coating thickness, such as drips or runs, will translate into variations in the final appearance of the resulting mark. Proper spraying may require a little practice to obtain the correct coating thickness – which should be no more than 0.002" - .003" (0.05mm) thick. A good exercise for developing the correct spraying technique is to draw a line on white paper using a black marker and then spray only as much **LaserBond 100** as is needed to make the line fade away. If the **LaserBond 100** coating is too thick, it will require more power to make the mark and the image resolution will decrease.

Caution: If metal surfaces have a lacquer coating, the **LaserBond 100** material **will not work**.

Drying: It is important that the **LaserBond 100** is allowed to completely dry and will air-dry in about 2 minutes. The drying time can be decreased by using a hair dryer, heat gun or a heat lamp.

Marking: This step may require some trial and error to optimize your laser for a particular substrate material. Keep in mind that all lasers react differently depending on the substrate, the type of laser, the laser power and speed, the lens and other factors. Softer metals such as aluminum, copper and brass require more power or slower speeds to obtain a permanent mark. It is recommended that at least 30 Watts of CO₂ laser power be used; however lower powers can achieve good results. Please refer to our website: www.laserbondingtech.com to obtain Laser Settings and further information and instructions.

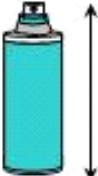
	Glass		Ceramic		Stainless Steel		Aluminum	
	30 Watt	50 Watt	30 Watt	50 Watt	30 Watt	50 Watt	30 Watt	50 Watt
Power	30%	20%	50%	30%	100%	100%	100%	100%
Speed	30%	30%	50%	50%	50%	75%	5%	10%
DPI/PPI	300/300	300/300	600/600	600/600	500/500	500/500	1000/1000	1000/1000

For Nd:YAG, DPSS or Fiber lasers, **20 - 30 Watts** of laser power will be necessary in order to use a marking speed of 300 - 500 mm/second or faster. Again, you may need to run several tests to refine the laser settings.

Clean up: After use, the excess **LaserBond 100** may be cleaned up using a damp cloth or paper towel or it can be rinsed under plain tap water. It is safe to let the excess material go down the drain. The nozzle should be cleaned by inverting the can and spraying until mist becomes clear. Any excess material on the nozzle should be removed with water. The nozzle can be removed and soaked in warm water or alcohol if spraying difficulty is encountered or nozzle becomes clogged.

IMPORTANT

Before Spray
shake can for at least 60 seconds in order to apply an even, thin coating



After Spray
invert can and press nozzle for a few seconds to clear LBM material in valve

