



» INDUSTRY BULLETIN

Cesa™ Laser Marking Additives for the Transportation Industry

Many thermoplastic automotive parts require a permanent marking, and laser marking is among the most efficient means to do so. A laser mark lasts the lifetime of a part; is resistant to solvents, oils, and scratching; and is easy to read. Our Cesa™ Laser Marking Additives not only contain a laser marking additive but also deliver a part's color and can include other additives such as those for scratch or UV resistance.

Cesa Laser Marking Additives can be used with thermoplastics commonly used in vehicles including:

- PP
- PC/ABS
- Polyamide
- Polyacetal (POM)

WHY SELECT LASER MARKING?

A laser mark remains legible even after many years. Unlike other marking processes, it does not require consumables such as hot foil tapes, inks and solvents. The cost associated with maintaining a laser marking system is lower than for printing systems, and laser marking supports greater design and production flexibility; changing a marking is as simple as pushing a few buttons on a laser marking unit.

Applications for laser marking include:

- Safety belt buckles
- Backside of A-, B- and C-pillars
- Critical safety parts
- Dashboard controls and gauges
- Knobs and buttons

In addition to parts that may require a permanent mark, laser marking also can be used to add personalization or branding elements to a vehicle. For example, a laser mark can provide the appearance of stitching where two parts adjoin.

GETTING STARTED WITH LASER MARKING

No universal laser marking solution exists; selection of an appropriate laser marking additive is critical to achieve excellent marking performance.

Avient has experience formulating Cesa Laser Marking Additives that can work with a wide variety of polymers and processes, including injection molding, blow molding and extrusion. Keys to successful laser marking projects include collaboration and expertise. Avient has a track record of successfully collaborating with customers in the transportation industry and developing solutions for a wide variety of applications, materials and processes. Let's collaborate on your upcoming projects.

Want to learn more? Contact us at info@avient.com or go to avient.com.



HOW DOES LASER MARKING WORK?

During processing, a laser beam activates laser sensitive additives within a masterbatch. The activation changes the molecular structure of these additives, causing a color change that provides the vivid contrast of laser marking. Laser marking typically has little effect on part integrity. The mark can be white or dark in color.

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