## CLARIANT

Discover Value
PERFECT LASER
MARKING OF
CONSUMER DURABLES

This story highlights the high-speed, razor sharp laser-marking technology that is an anticounterfeiting solution for consumer goods. Clariant developed CESA®- laser for durable markings that are resistant to chemicals, long-term weathering and challenging environments.



Water purifier manufacturers are constantly looking to innovate and come up with sustainable solutions to gain a competitive edge in the market. One of the noticeable results of increasing research and development activities has been the introduction of water purifiers equipped with candle filtration, activated carbon, ultra-filtration, ultra-violet, ozone, and reverse osmosis (RO) technologies, to name a few.

Laser technology helps water purifier manufacturers to reduce duplication of spare parts thus giving consumers 100% pure & natural mineral rich water. The technology is also focused on eliminating the printing ink used for shelf-life, bar codes and other variable information that must be placed on the products. Less ink means less contamination when it comes to recycling.



## WHAT DOES OUR PRODUCT DO?

Polyolefins and other polymers that are highly sensitive to laser radiation require special additives to make laser marking visible. CESA®-laser masterbatches offers an effective solution for easy and long-lasting high-contrast marking on plastic articles. It enables contact-free, permanent marking, labelling and decoration of plastic parts without using any printing ink or solvents. Laser marking utilizes the energy of a highly focused laser beam to produce a combined thermal and photochemical effect. Laser marking is abrasion-resistant, chemical-resistant and weather-resistant and can even be applied to soft, coarse, stepped or curved surfaces. Clariant's masterbatches has further extended the limits of the technology by making it possible to mark in colors beyond traditional gray tones.

## HOW DOES OUR PRODUCT OFFER AN INNOVATIVE EDGE?

The recent innovation in CESA®-laser masterbatches provides effective solution to authenticity and security of consumable parts in water purifiers and supports consumers by protecting their health by offering superior products. By this application, we have provided solution with our special formulations which supports and meets food contact regulations required in the consumer goods segment as per US FDA norms. The marks are permanent and resistant to water, oil, grease or fatty foods. The additives provide excellent contrast and allow high-speed marking. It provides brand owners a cost effective anticounterfeit solution through the masterbatches.

## IS OUR PRODUCT PROMISING A SUSTAINABLE ADVANTAGE?

CESA®-laser masterbatches provides environment friendly, clean (free of ink), high speed printing solution resulting in irreversible, permanent marking. It also improves recyclability of plastic articles by eliminating printing ink that is presently used to print variable information on plastic products. Less ink means less contamination when it comes to recycling. It supports 'Design for Recycling' imitative in the plastic industry.

