



## » PRODUCT BULLETIN

# Cesa™ Anti-fog Plus Additives for Multilayer Films

We buy with our eyes and this is no truer than wanting to see the food we purchase, especially fresh perishable foods. Cesa™ Anti-fog Plus solutions are the next generation additives, which work in both hot and cold fog conditions and in mono and multilayer film, to keep food attractive for longer.

Thanks to a unique combination of multi-additives in the masterbatch formulation, Cesa Anti-fog Plus materials allow good fog clearance before and after lamination, provide quick performance in both hot and cold conditions.

With the ever-increasing demand for ready to eat and ready to cook foods, and the growth of the food deliver market, lids and protective films produced with this food contact-safe additives allow customers to see through the packaging, observing the quality of the content. Adding an anti-fog solution to film delivers value to brand owners and film manufacturers in multiple ways:

**Reduce operating cost:** Anti-fog plus additives are a drop-in solution. Film manufacturers don't need to add a secondary process to achieve anti-fog properties.

**Prevent condensation:** Controlling the distribution and effectiveness of anti-fog plus additives are easier than controlling the efficacy of a coating. Anti-fog plus additives consistently prevent condensation.

**Support hygiene concept:** Packaging with anti-fog plus additives help to limit the growth of bacteria and fungi and reduce waste by prolonging the shelf life of food, maintaining its freshness in the packaging.

**Increase brand image:** Anti-fog plus additives enhance the appeal and attractiveness of food packaging.

## KEY CHARACTERISTICS

Cesa Anti-fog Plus additives help packaging to retain clarity, maintaining an excellent balance of immediate and long-lasting effects under both hot and cold conditions in mono and multilayer film. They reinforce packaging integrity by maintaining a film's sealing properties, avoiding delamination of the film structure, and maintaining transparency.

## MARKETS AND APPLICATIONS

Cesa Anti-fog Plus additives are formulated for use in transparent packaging of chilled fresh foods such as:

- Fruit
- Vegetables
- Meat
- Fresh fish
- Ready-to-cook-food and ready-to-eat meals

These anti-fog plus materials can be incorporated into mono and multi-layer films such as:

- Lidding barrier film on rigid or semi-rigid containers
- Stretch film
- Shrink film



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