

Antifogging Agent Masterbatch

Introduction

Antifogging agent masterbatch prevents or reduces the condensation of water in the form of small droplets which resemble fog.

Antifogging treatments work by minimizing surface tension, resulting in a non-scattering film of water instead of single droplets, an effect called wetting. Antifogging treatments usually work either by application of a surfactant film or by creating a hydrophilic surface.

Product Benefits

- Antifogging performance on films
- Avoid exudation problem
- Approved for food contact
- Good transparency of the final articles

Antifogging Agent for Films

Antifogging agents are generally surfactants and are not compatible with polyolefin polymers. In polyolefin films, antifogging agent is uniformly dispersed into the films and transferred to the surface, increasing the critical wet-ability.

Such a phenomenon, in which the difference between polymer and water is definitely decreased, occurs at the same time when water is partially dissolved to decrease the surface tension of water. As a result, the contact angle between the surface of the polymer and the water decreases causing the water to spread more uniformly, thereby reducing the opacity due to the formation of water drops. It makes the film use longer by adding antifogging agent.

Applications

- Biaxially Oriented PP film
- Polyolefin Casting and Blown films (Agricultural and Food wrapping films)

Recommended Dosage Rate

- Up to 6 wt%

Because processability and quality of applications are depended on processing conditions (temperature, pressure, speed, etc.) and applied resins, the optimum dosage rate must be determined by pre-test.