PolyOne

Product Bulletin

Color & Additives

OnCap™ BIO Anti-fog T

Anti-fog additive for biopolymers

Challenge

Fogging is the condensation of water vapor on the surface of a film. It typically occurs when a gas mixture inside a closed package is exposed to a cool environment, below the dew point of the gas/vapor mixture inside the package, leading to the formation of small, discrete droplets on the film. If the droplets are small enough, it looks like fog has formed inside the package. The result is loss of transparency and reduction of visual appearance of the content inside the package. This reduction in transparency is often associated with the loss of food freshness and quality. Indeed, water contact may lead to the deterioration of food inside the package.

Solution

To avoid formation of the droplets, the surface tension of film needs to be above that of water. Normally, a wide range of surface active ingredients are available to achieve this effect, but must be balanced by the need to maintain renewable content and transparency. PolyOne has substantial experience with anti-fog and biopolymer technologies and has formulated OnCap™ BIO Anti-Fog T to meet these needs.

Value Provided

The use of OnCap BIO Anti-Fog T prevents the occurrence of fogging inside closed film packages.

- The original shelf appearance of chilled prepackaged food is maintained, facilitating consumer appeal and leading to increased sales and profits.
- By preventing the formation of small water droplets on the inside of film packaging, the potenial deterioration of the packaged food on the shelf is prevented, thus reduceing spoilage.
- OnCap BIO Anti-fog T is based on 100% natural resources, which allows brand owners to maintain the “green” positioning of their consumer goods.

These products are designed to enhance the performance and applicability of bio-derived or biodegradable polymers and are certified as a PolyOne Sustainable Solution*

To learn more go to www.polyone.com/sustain

* The PolyOne Sustainable Solution certification is awarded to those products or services that meet defined criteria for sustainability in areas such as renew-ability, recycle-ability, reusability, eco-friendly composition, or resource efficiency.

Implementation

OnCap Anti-fog is available as a compound, or as a solid or liquid concentrate, for use in PLA or starch-based resins. Usage rates depend on the structure of the film product (single vs. multilayer).

Applications

OnCap BIO Anti-fog T can be used in a variety of film processing equipment, including film extrusion, cast film and blown film lines. The typical application is for chilled, prepackaged food products.

CONTACT INFORMATION **Email: BioSolutions@polyone.com**

Americas
U.S. Avon Lake, Ohio
+1 440 930 1000

Argentina – Buenos Aires
+ 00541142005917

Brasil – Campinas
+55 19 3206 0561

Mexico – Toluca
+52 722 2790200

Asia
China – Shanghai
+86 (0) 21 5080 1188

China – Shenzen
+86 (0) 755 2969 2888

China- Tianjin
+86 (0) 22 2532 8818

India – Mumbai
+91 9820 194 220

Thailand – Rachatewa
Bangplee Samutprakarn
+65 (0) 2327 9100

Europe
Belgium – Assesse
+32 (0) 83 660 211

Czech Republic – Praha
+ 420 224 142 214

Denmark – Glostrup
+45 (0) 43 20 6300

France – Saint-Ouen L'Aumône
+33 (0) 1 34 40 39 50

France – Tossiat
+33 (0) 4 74 42 69 70

Germany – Bendorf
+49(0) 2622 700 90

Hungary – Győr
+36 (0) 96 515 610

Italy – Gallarate
+39 03 31 797 448

Spain – Oricain, Navarra
+34 (0) 948 331 011

Sweden – Angered
+46 (0) 31 92 84 50

PolyOne

Beyond Polymers.
Better Business Solutions.℠

www.polyone.com

PolyOne Americas
33587 Walker Road
Avon Lake, Ohio 44012
United States
+1 440 930 1000

PolyOne Asia
Guoshoujing Road No. 88
Z.J Hi-Tech Park, Pudong
Shanghai, 201203, China
+86 (0) 21 5080 1188

PolyOne Europe
Rue Melville Wilson 2
5330 Assesse, Belgium
+32 (0) 83 660 211