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 renewability, recyclability, sustainability of composition, or resource efficiency.

**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 potential deterioration of the packaged food on the shelf is prevented, thus reducing 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.

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**Product Bulletin**

**Color & Additives**

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**Trim:** 8.5in x 11in and 8.25in x 11.6875in

**Bleed:** 8.75in x 11.9375in

**Asset No. 76516-C**
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.