

Description

GrowPack Anti-Fog Shrink Film is a strong, clear, biaxially oriented, heat-shrinkable, anti-fog, polyolefin-based film. The film provides superior, fast-acting, anti-fog properties, achieving clear, condensation-free retail packages within one hour. The film has excellent stretch, recovery, toughness and tear resistance, and will not brittle with age. GrowPack Anti-Fog Shrink Film is FSSC 22000 approved and microwavable.

GrowPack Anti-Fog Shrink Film

DATA SHEET

Uses

GrowPack Anti-Fog Shrink Film is commonly used for fresh produce applications where ambient temperature variation creates problems with package condensation and fogging. GrowPack Anti-Fog Shrink Film provides the industry's fastest-acting anti-fog performance, creating clear, retail-ready packages in one hour.

GrowPack Anti-Fog Shrink Film is suited to overwrap a wide variety of fresh vegetables and fruit, including individually packaged produce, pre-cut or unitized items and multi-packs. The film offers excellent strength and a tight protective barrier to protect products, manage moisture and maintain good-looking packages through distribution and retail.

GrowPack Anti-Fog Shrink Film is designed for packages that will be refrigerated in the case or displayed at room temperature. Treated film can be printed for colorful brand graphics and consumer information.

Significant Features

Sealing

- Compatible with all shrink sealing systems.
- Wide sealing temperature range.
- Seals easily even under less-than-optimum conditions.
- Seals at higher speeds than many other cross-linked shrink films.
- Seals are thin and less likely to leak than ordinary polyolefin films.

Shrinking

- Allows lower tunnel temperatures that can result in utility cost savings.
- Runs on wide variety of tunnels and shrinks under less-than-optimum conditions. It is not dependent on high air velocity to get good shrink.
- Achieves medium shrink force.
- Requires sufficient air evacuation for optimal package appearance.

Standard Put-Ups

- Available in 45, 60 and 75 gauge.
- Flat film is available in custom widths from 3" to 100" in ¼" increments.



With GrowPack Anti-Fog Shrink Film, produce packages are clear and retail-ready in 1 hour, delivering superior performance in the least amount of time.

FDA/USDA Status

GrowPack Anti-Fog Film, for food packaging use comply with U.S. Food and Drug Administration (FDA) requirements under the Federal Food, Drug and Cosmetic Act as amended. This film complies with FDA regulation 21 CFR 177.1520—Olefin polymers, allowing use for articles that contact food, except for articles used for packing or holding food during cooking.

Use

Crawford Packaging does not recommend using traditional heating or cooking methods for foods wrapped in GrowPack Anti-Fog shrink films. For conditions specific to microwave cooking, please request documentation that is specific for your application through your Crawford representative.

Disposal

Preferred options for disposal are: (1) recycling, SPI Code 4; (2) incineration with energy recovery; and (3) landfill. The high fuel value of this product makes option 2 very desirable for material that cannot be recycled.

Storage

Storage below 32°C (90°F) is recommended. Prolonged exposure to temperatures moderately above 32°C (90°F) or brief exposure to temperatures well above 32°C (90°F) may cause difficulty in unwinding film.

Summary of Properties

Typical Properties of GrowPack Anti-Fog Film

Property	ASTM Test Method	Unit	Gauge		
			45	60	75
Haze	D1003	%	6.5	7.0	7.5
Gloss	D2457	GU	85	85	80
COF, Kinetic	D1894	gf	0.30	0.30	0.30
Shrinkage	D1204	% (area)	45	45	40
Shrink Force (100°C)	D2838	g/in	60	70	80
Stiffness Modulus	D882	kpsi	55	55	50
Tensile Strength	D882	kpsi	14	14	14
Elongation	D882	%	130	140	160
WVTR	F1249	g/100 in ² /24 hr (37.8°C, 100% RH)	2.3	1.6	1.5
Oxygen Transmission	D3985	cc/100 in ² /24 hr (23°C, 50% RH)	1,000	600	500
CO ₂ Transmission	-	cc/100 in ² /24 hr (23°C, 0% RH)	2,500	2,500	2,300

Note: These values are typical data for GrowPack Anti-Fog Shrink Film and are not product release specifications, warranties or limiting specifications. Values are based on initial production and test runs during development of this film.



www.celplast.crawfordpackaging.com

The technical data contained herein are guides to the use of GrowPack Anti-Fog films. The advice contained herein is based upon tests and information believed to be reliable, but users should not rely upon it absolutely for specific applications because performance properties will vary with processing conditions. It is given and accepted at user's risk, and confirmation of its validity and suitability in particular cases should be obtained independently. GrowPack Anti-Fog makes no guarantees of results and assumes no obligations or liability in connection with its advice. This publication is not to be taken as a license to operate under, or recommendation to infringe, any patents.

CAUTION: Do not use in medical applications involving permanent implantation in the human body.