

Description

Clysar® EVOX™ shrink film is a versatile, high-performance recyclable polyolefin shrink film developed to meet consumer demand for sustainability in branded retail packaging. Approved for Store Drop-Off label use with an official letter of prequalification, this new market-leading film is ultra-strong, sparkling clear and exceptionally tough. It runs flawlessly at high speeds, on a variety of equipment, with wide operating windows.

Clysar® EVOX™ Films

DATA SHEET

Uses

Clysar® EVOX™ shrink film is a high-performance drop-in solution for brands seeking a sustainable alternative that meets recyclable labeling initiatives, delivers a premium package appearance and provides outstanding product bundling and protection.

A highly functional alternative for non-recyclable crosslinked films, Clysar® EVOX™ film packages virtually any type of product and offers superior toughness and seal strength, optics and cleanup.



High-Speed,
Recyclable Film for
Ultimate Protection

Significant Features

General

- Meets consumer demand for recyclable packaging: designed for recovery/recyclability at drop-off points nationwide.
- Prequalified for fast-track approvals.
- Excellent toughness and tear resistance.
- High gloss, clarity and shine.
- Great package cleanup and appearance.
- Ideal for printed shrink film applications, heavy multi-packs and more.

Equipment

- Designed for high-speed applications.
- Performs on multiple types of packaging equipment including manual, semi-automatic, automatic and static seal machines.

Sealing

- Provides strong, durable seals with all sealing systems including wires, knives and electrostatic overlap.
- Exceptionally wide sealing window.
- Requires little or no cooling dwell for faster throughput.

Shrinking

- Exceptional heat/burn-through resistance.
- Higher than typical shrink force for robust, tight, finished packages.
- Ideal for bundling, multi-packs and shipping stabilization.



Recyclable
Shrink Film

Approved for the Store Drop-Off Label,
with official letter of prequalification
from the How2Recycle® Program



how2recycle.info

How2Recycle is the only label program that can supply the official **How2Recycle** icon for packaging. In order to use the Store Drop-Off label on your EVOX™ shrink package, you will need to contact **How2Recycle** directly and complete the **How2Recycle** label request form. If you have any questions regarding the information necessary to complete the label request, please contact your Clysar representative for assistance.

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Clysar®

Also see Clysar® EVO™ film, for all-purpose value and performance.

FDA/USDA Status

Clysar® films sold by Clysar, LLC, for food packaging use comply with U.S. Food and Drug Administration (FDA) requirements under the Federal Food, Drug and Cosmetic Act as amended. Clysar 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

Clysar, LLC, does not recommend using traditional heating or cooking methods for foods wrapped in Clysar® shrink films. For conditions specific to microwave cooking, please request documentation that is specific for your application through your Clysar representative.

Disposal

Preferred options for disposal are: (1) Store drop-off recycling, SPI Code 4; and (2) incineration with energy recovery.

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.

For more detailed information on the safe handling of Clysar® films, a “Safety in Handling and Use” guide or the OSHA Material Safety Data Sheets can be obtained from your Clysar representative.

Standard Put-Ups

- Available gauges: 45, 60 and 75.
- Flat film is available in custom widths from 3” to 100” increments.*
- Folded film is available in custom widths from 3” to 50” in 1” increments.*
- Folded film will have half the linear footage of flat film for same gauge and roll dimensions.
- Pre-perforated film in standard pattern is available for all gauges for folded and flat film.
- EVOX™ film is wound on 3” and 6” cores to the standard roll sizes shown in Table 1.

*Contact your Clysar representative for width-specific information.

Summary of Properties

Clysar® EVOX™ - Linear Footage Flat Film (Table 1)

| Core I.D., in. | Roll O.D., in. | Gauge | | |
|-------------------|-------------------|--------|--------|--------|
| | | 45 | 60 | 75 |
| 3 | 9½ | 11,660 | 8,750 | 7,000 |
| 3 | 13 | 23,320 | 17,500 | 14,000 |
| 6 | 11 | 11,660 | 8,750 | 7,000 |
| 6 | 14 | 23,320 | 17,500 | 14,000 |
| 6 | 18¾ | 46,640 | 35,000 | 28,000 |

Typical Properties of Clysar® EVOX™ Film (Table 2)

| Property | ASTM Test Method | Unit | Gauge | | |
|---------------------------------|---------------------|-------------------------------|-------|------|-------|
| | | | 45 | 60 | 75 |
| Haze (avg) | D1003 | % | 2.5 | 2.7 | 3.0 |
| Gloss at 20° (min) | D2457 | - | 143 | 148 | 148 |
| COF, Kinetic | D1894 | - | 0.23 | 0.24 | 0.20 |
| Shrinkage, 90°C Hot Water Bath | D2732-14 | % (area) | 50 | 50 | 50 |
| Shrink Force, 100°C (212°F) | D2838 | g | 65 | 70 | 75 |
| Stiffness Modulus (avg) | D882 | kpsi | 66 | 65 | 64 |
| Tensile Strength (avg) | D882 | kpsi | 15 | 15 | 15 |
| Elongation (avg) | D882 | % | 126 | 129 | 140 |
| Tear Strength (avg) (Elmendorf) | D1922 | g | 11 | 17 | 20 |
| Spencer Impact | D3420 | lbf | 6.40 | 9.00 | 13.00 |
| WVTR | F1249 | g/100 in ² /24 hr | 1.7 | 1.5 | 1.4 |
| Oxygen Transmission | D3985 | cc/100 in ² /24 hr | 850 | 550 | 500 |

Note: These values are typical data for EVOX™ shrink film and are not intended for use as limiting specifications.

Clysar®

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The technical data contained herein are guides to the use of Clysar® 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. Clysar 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. For other medical applications, see Clysar Medical Caution Statement, MCS_02.