

Clysar VEZ

Description

Bemis Clysar® VEZ is a clear, biaxially oriented, heat-shrinkable, multilayer film with one the lowest shrink force available in the Clysar line. Clysar VEZS is a hot slip version of VEZ.

Uses

Clysar VEZ is designed for packaging items that need a low shrink force such as thin stacks of paper or boxes that tend to crush. It can also be used for packaging lightweight, low abuse products. It combines excellent optics, high-speed machinability and clean shrink appearance with the economics of high yield, reduced changeover and downtime and greater use of storage space.

Significant Features

Sealing

- Makes strong electrostatic seals that will hold up through distribution.
- Provides very consistent, strong, durable impulse wire seals.
- Will heat seal at lower temperatures than other multilayer films.
- Has a wider heat-sealing range than most other value-oriented films.
- Does not corrode sealing wires or equipment.
- Does not leave a carbon deposit on sealing wires.
- Pinhole-free seals.

Shrinking

- Has lower shrink force than most other polyolefin-based films.
- Consistently delivers a clean shrink appearance with minimum dog-ears, chatter marks, and crow's feet.
- Has a wider shrink temperature range and higher available shrinkage than most other value-oriented films.
- Good burn-through resistance.
- Balanced shrinkage.

General

- Excellent film durability, even at freezer temperatures.
- Good sheet stiffness.
- Will not embrittle with age.
- High gloss, clarity, sparkle.
- Outstanding performance on high-speed automatic shrink equipment.
- Uniform package appearance.

Standard Put-Ups

- Clysar VEZ is available as either flat or folded film.
- Flat film is available untreated as VEZ or sprayed for improved hot slip as VEZS.
- Flat film is available in widths from 5-65 inches in ¼ inch increments
- Folded film is available untreated as VEZF or sprayed for improved hot slip as VEZFS.
- Folded film is available in widths from 5-31 inches in ½ inch increments
- Folded film will have approximately half the linear footage of flat film for same gauge and roll dimensions.
- Film is wound on 3" and 6" cores to the standard roll sizes as shown in Table 1.

Table 1
Clysar® VEZ
Linear Footage, Flat Film

Core I.D. in	Roll O.D. in	50 Gauge
3	9 ½	10,500
3	13	21,000
6	11	10,500
6	14	21,000
6	18 ¾	35,000

FDA/USDA Status

Clysar films sold 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. This FDA compliance and a continuing guarantee from Bemis Clysar will meet FDA requirements for packaging meat and poultry products.

Use

Bemis Clysar does not recommend heating or cooking foods in Clysar Shrink Film. High temperature and high speed sealing of Clysar will release small amounts of "smoke" which should be removed by adequate ventilation in normal commercial practice.

Disposal

Preferred options for disposal are (1) recycling SPI code-class 7, (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.

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

Table 2
Typical Properties of Clysar® VEZ

Property	ASTM Test Method	Unit	50 Gauge
Haze (avg)	D1003	%	2.0
Gloss at 20° (min)	D2457	(photocell)	145
COF, Kinetic	D1894		0.21
Shrinkage, 136°C (277°F) * 10 min	D1204	% (area)	65
Shrink Force 110°C (230°F)	D2838	g	77
Stiffness Modulus (avg)	D882	kpsi	77
Tensile Strength (avg)	D882	kpsi	10
Elongation (avg)	D882	%	90
Tear Strength (avg) (Elmendorf)	D1922	g	11
Spencer Impact	D3420	in-lbs	5
WVTR	F1249	g/100 in ² /24 hr	1.9
Oxygen Transmission	D3985	cc/100 in ² /24 hr	790
CO ₂ Transmission	D1434	cc/100 in ² /24 hr	3000

* Film Temperature Note:

These values are typical data for Clysar VEZ shrink film and are not intended for use as limiting specifications.

Bemis Worldwide

Toll-free (U.S.A.) 888 4-CLYSAR

Internet/World Wide Web:
<http://www.clysar.com>

E-Mail:
clysar@bemis.com

The technical data contained herein are guides to the use of Bemis 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. Bemis 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 Bemis Medical Caution Statement, MCS_01.