www.ritrama.com



PRODUCT CODE: 3-1018

PRODUCT DESCRIPTION

1.0-mil high clarity polyester overlaminating film. This product is designed to protect and enhance visual images such as labels, decals and other identification pieces.

APPLICATIONS

- Decals
- Labels
- Product identification

FEATURES AND BENEFITS

- UL-Recognized product: file number MH14249.
- High clarity

TECHNICAL DATA

Face Material
Color and Finish
High clarity

Adhesive
T5 paragraph of the State of

Adhesive 75, permanent acrylic Liner 50# glassine bleached

TYPICAL CHARACTERISTICS

Average Adhesion Values
(PSTC-1, 180° peel @ 12"/min., 73°F, on Stainless Steel)

2.9 lbs./inch
3.9 lbs./inch

Minimum Application Temperature 50°F
Service Temperature Range -65°F to +225°F

Shelf Life (@ 73°F, 50% RH) 2 years Outdoor Life 2 years

CHEMICAL RESISTANCE

Distilled Water (24 hr)

Detergent (24 hr)

No Effect

10% HC1 (10 min)

No Effect

10% Ammonium Hydroxide (10 min)

No Effect

Gasoline (1 hr)

No Effect

No Effect

The above information is based on research believed to be reliable, but does not constitute a warranty. All material should be tested by the purchaser to determine suitability of the product for their purposes.

June-05

Ritrama Inc. Minneapolis, MN 800 Kasota Ave. S.E. Minneapolis, MN 55414 Toll Free: 1-800-328-5071 Phone: 612-378-2277 Fax: 612-378-9327

341 Eddy Road Cleveland, OH 44108 Toll Free: 1-800-328-5071 Phone: 216-851-2300 Fax: 216-851-1938 Email: info@ritrama.com

Ritrama Inc. Cleveland, OH

Email: info@ritrama.com Email: info@ritrama.com Warehouses: Chino, CA-Orlando, FL-Wichita, KS-Seekonk, MA- Cleveland, OH

www.ritrama.com



PRODUCT CODE: 3-1020

PRODUCT DESCRIPTION

2-mil high clarity polyester overlaminating film. This product designed to protect and enhance visual images such as labels, decals and other identification pieces.

APPLICATIONS

- Decals
- Labels
- Product identification

FEATURES AND BENEFITS

UL-Recognized product: file number MH14249.



TECHNICAL DATA

Face Material 2.0 mil Polyester Color and Finish High clarity

Adhesive 75 permanent acrylic Liner 50# glassine bleached

TYPICAL CHARACTERISTICS

Average Adhesion Values 15 min. 24 hr. 3.8 lbs./inch 4.9 lbs./inch (PSTC-1, 180° peel @ 12"/min., 73°F, on Stainless Steel)

50°F Minimum Application Temperature

-65°F to +225°F Service Temperature Range

Shelf Life (@ 73°F, 50% RH) 2 years Outdoor Life 2 years

CHEMICAL RESISTANCE

June-05

No Effect Distilled Water (24 hr) No Effect Detergent (24 hr) No Effect 10% HC1 (10 min) No Effect 10% Ammonium Hydroxide (10 min) No Effect Gasoline (1 hr)

The above information is based on research believed to be reliable, but does not constitute a warranty. All material should be tested by the purchaser to determine suitability of the product for their purposes.

> Ritrama Inc. Minneapolis, MN 800 Kasota Ave. S.E. Minneapolis, MN 55414 Toll Free: 1-800-328-5071 Phone: 612-378-2277 Fax: 612-378-9327

Ritrama Inc. Cleveland, OH 341 Eddy Road Cleveland, OH 44108 Toll Free: 1-800-328-5071 Phone: 216-851-2300 Fax: 216-851-1938 Email: info@ritrama.com

Email: info@ritrama.com Warehouses: Chino, CA-Orlando, FL-Wichita, KS-Seekonk, MA- Cleveland, OH

www.ritrama.com



PRODUCT CODE: 3-1024

PRODUCT DESCRIPTION

1.0-mil UL recognized matte clear polyester overlaminating film. This product designed to protect and enhance visual images such as labels, decals and other identification pieces.

APPLICATIONS

- Decals
- Labels
- Product identification

FEATURES AND BENEFITS

UL-Recognized product: file number MH14249.



TECHNICAL DATA

Face Material 1.0 mil polyester Color and Finish Matte clear

Adhesive 75, solvent based permanent acrylic

Liner 50# glassine white

TYPICAL CHARACTERISTICS

2<u>4 hr.</u> Average Adhesion Values 15 min. 2.8 lbs./inch (PSTC-1, 180° peel @ 12"/min., 73°F, on Stainless Steel 3.7 lbs./inch Minimum Application Temperature 50°F Service Temperature Range -65°F to +225°F Shelf Life (@ 73°F, 50% RH) 2 years Outdoor Life 2 years

CHEMICAL RESISTANCE

Distilled Water (24 hr) No Effect Detergent (24 hr) No Effect 10% HC1 (10 min) No Effect 10% Ammonium Hydroxide (10 min) No Effect Gasoline (1 hr) No Effect

The above information is based on research believed to be reliable, but does not constitute a warranty. All material should be tested by the purchaser to determine suitability of the product for their purposes.

June-05

Ritrama Inc. Minneapolis, MN 800 Kasota Ave. S.E. Minneapolis, MN 55414 Toll Free: 1-800-328-5071 Phone: 612-378-2277 Fax: 612-378-9327 Email: info@ritrama.com



PRODUCT CODE: 3-1658

PRODUCT DESCRIPTION

1-mil clear polypropylene overlaminate. The face film is non-treated, with write-on, write-off capability. May be used as a coupon base in the production of multi-layer promotional labels and coupons.

APPLICATIONS

- Decals
- Coupons
- Labels
- Point of purchase displays

FEATURES AND BENEFITS

• 1.0-mil clear non-treated polypropylene with 47 adhesive on a 50# bleached glassine liner.

TECHNICAL DATA

Face Material 1.0 mil polypropylene non-treated

Color and Finish Gloss clear

Adhesive 47 permanent acrylic Liner 50# glassine white

TYPICAL CHARACTERISTICS

Average Adhesion Values
(PSTC-1, 180° peel @ 12"/min., 73°F, on Stainless Steel)
Minimum Application Temperature

15 min.
24 hr.
1.3 lbs./inch
50°F

Service Temperature Range -40°F to +180°F

Shelf Life (@, 73°F, 50% RH) 2 years

CHEMICAL RESISTANCE

Distilled Water (24 hr)

Detergent (24 hr)

No Effect

10% HC1 (10 min)

No Effect

10% Ammonium Hydroxide (10 min)

No Effect

Anti-Freeze (24 hr)

No Effect

No Effect

No Effect

No Effect

No Effect

No Effect

The above information is based on research believed to be reliable, but does not constitute a warranty. All material should be tested by the purchaser to determine suitability of the product for their purposes.

Aug-07

Ritrama Inc. Minneapolis, MN 800 Kasota Ave. S.E. Minneapolis, MN 55414 Toll Free: 1-800-328-5071 Phone: 612-378-2277 Fax: 612-378-9327 Email: info@ritrama.com Ritrama Inc. Cleveland, OH 341 Eddy Road Cleveland, OH 44108 Toll Free: 1-800-328-5071 Phone: 216-851-2300 Fax: 216-851-1938 Email: info@ritrama.com

Warehouses: Chino, CA-Orlando, FL-Wichita, KS-Seekonk, MA- Cleveland, OH

www.ritrama.com



PRODUCT CODE: 3-5042

PRODUCT DESCRIPTION

2-mil clear polypropylene top coated for excellent ink adhesion by a variety of print methods including UV screen, flexography, letterpress and gravure. This product is designed for in applications involving semi-rigid or rigid packaging. Good stiffness for high speed dispensing and diecutting.

APPLICATIONS

Rigid and Semi-rigid containers for:

- Health and beauty
- Household chemical
- No-label look labels
- Pharmaceutical
- Beverage applications

FEATURES AND BENEFITS

- Good printability
- High speed dispensing

TECHNICAL DATA

Face Material 2.0 mil polypropylene top coated

Color and Finish Gloss clear

Adhesive 47 permanent acrylic Liner 50# glassine white

TYPICAL CHARACTERISTICS

Average Adhesion Values 15 min. (PSTC-1, 180° peel @ 12"/min., 73°F, on Stainless Steel 23 oz. 31 oz. 50°F Minimum Application Temperature

Service Temperature Range -40°F to +180°F

Shelf Life (@ 73°F, 50% RH) 2 years

CHEMICAL RESISTANCE

Distilled Water (24 hr) No Effect Detergent (24 hr) No Effect 10% HC1 (10 min) No Effect 10% Ammonium Hydroxide (10 min) No Effect

The above information is based on research believed to be reliable, but does not constitute a warranty. All material should be tested by the purchaser to determine suitability of the product for their purposes.

Jul-98 Form 108-01 (1/99)

> Ritrama Inc. Minneapolis, MN 800 Kasota Ave. S.E. Minneapolis, MN 55414 Toll Free: 1-800-328-5071 Phone: 612-378-2277 Fax: 612-378-9327 Email: info@ritrama.com



PRODUCT CODE: 3-5333

PRODUCT DESCRIPTION

5.0 mil Floor TalkersTM matte clear scuff resistant vinyl with FG laminating adhesive provides protection to your graphics and slip resistance for your floor graphic advertising. Sold as a system product combined with 35334. UL-Classified product: file number SA12057.

APPLICATIONS

- Floor graphic advertising
- Protection for your graphics

FEATURES AND BENEFITS

- Scuff resistant
- 5.0 mil matte clear scuff resistant vinyl with FG adhesive on a 50# bleached glassine liner.

TECHNICAL DATA

Face Material 5.0 mil vinyl

Color and Finish Matte clear scuff resistant Adhesive FG laminating adhesive Liner 50# glassine bleached

TYPICAL CHARACTERISTICS

Target Adhesion Values 15 min. 24 hr. (PSTC-1, 180° peel @ 12"/min., 73°F, on Stainless Steel) 120 oz. 150 oz. 50°F Minimum Application Temperature -40°F to +180°F Service Temperature Range Shelf Life (@, 73°F, 50% RH) 2 years

Outdoor Durability Indoor use only

CHEMICAL RESISTANCE

No Effect Distilled Water (24 hr) No Effect Detergent (24 hr) 10% HCL (10 min) NA 10% Ammonium Hydroxide (10 min) No Effect Gasoline (1 hr) No Effect

The above information is based on research believed to be reliable, but does not constitute a warranty. All material should be tested by the purchaser to determine suitability of the product for their purposes.

June-05

Ritrama Inc. Minneapolis, MN 800 Kasota Ave. S.E. Minneapolis, MN 55414 Toll Free: 1-800-328-5071 Phone: 612-378-2277 Fax: 612-378-9327 Email: info@ritrama.com



PRODUCT CODE: 3-7146

PRODUCTION DESCRIPTION

1-mil clear polyester overlaminating film. Designed to protect and enhance visual images such as labels, decals and other identification pieces. This product is offered on a film liner for excellent wet out characteristics.

APPLICATIONS

- Decals
- Labels
- Product identification

FEATURES AND BENEFITS

1 mil clear polyester with an overlaminating acrylic adhesive on a film liner.

TECHNICAL DATA

Face Material 1.0 mil Polyester

Color and Finish

Adhesive Overlaminating solvent-based permanent acrylic

Liner Film liner

TYPICAL CHARACTERISTICS

Target Adhesion Values 15 min. 24 hr. (PSTC-1, 180° peel @ 12"/min., 73°F, on Stainless Steel) 2.3 lbs./inch 2.7 lbs./inch

50°F Minimum Application Temperature -65°F to +225°F Service Temperature Range

Shelf Life (@ 73°F, 50% RH) 2 years Outdoor Life 2 years

CHEMICAL RESISTANCE

No Effect Distilled Water (24 hr) No Effect Detergent (24 hr) No Effect 10% HC1 (10 min) 10% Ammonium Hydroxide (10 min) No Effect Gasoline (1 hr) No Effect

The above information is based on research believed to be reliable, but does not constitute a warranty. All material should be tested by the purchaser to determine suitability of the product for their purposes.

Feb-04

Ritrama Inc. Minneapolis, MN 800 Kasota Ave. S.E. Minneapolis, MN 55414 Toll Free: 1-800-328-5071 Phone: 612-378-2277 Fax: 612-378-9327 Email: info@ritrama.com





PRODUCT CODE: 3-7405

PRODUCTION DESCRIPTION

3.5-mil high gloss flexible vinyl is an economical vinyl that is ideal for general overlaminating.

APPLICATIONS

- Floor graphics
- General overlaminates
- Point of purchase displays

FEATURES AND BENEFITS

3.5-mil gloss clear flexible vinyl, 07UV permanent acrylic adhesive, 50# bleached glassine liner.

TECHNICAL DATA

Face Material 3.5-mil flexible vinyl

Color and Finish Gloss clear

Adhesive 07UV overlaminating permanent acrylic

Liner 50# bleached glassine

TYPICAL CHARACTERISTICS

Average Adhesion Values 15 min. (PSTC-1, 180° peel @ 12"/min., 73°F, on Stainless Steel) 50 oz. 75 oz.50°F Minimum Application Temperature

-40°F to +180°F Service Temperature Range

Shelf Life (@ 73°F, 50% RH) 2 years

CHEMICAL RESISTANCE

Distilled Water (24 hr) No Effect No Effect Detergent (24 hr) 10% HCl (10 min) N/A 10% Ammonium Hydroxide (10 min) No Effect Anti-Freeze (24 hr) No Effect SAE 20 Motor Oil (24 hr) No Effect

Gasoline (1 hr) Noticeable Lifting

The above information is based on research believed to be reliable, but does not constitute a warranty. All material should be tested by the purchaser to determine suitability of the product for their purposes.

Apr-02 Form 108-01 (1/99)

> Ritrama Inc. Minneapolis, MN 800 Kasota Ave. S.E. Minneapolis, MN 55414 Toll Free: 1-800-328-5071 Phone: 612-378-2277 Fax: 612-378-9327 Email: info@ritrama.com



PRODUCT CODE: 3-7496

PRODUCT DESCRIPTION

2-mil clear polyester overlaminating film. This product designed to provide an economical, quality film to protect and enhance visual images such as labels, decals and other identification pieces. This product is offered on a 1.2-mil polyester liner for excellent wet out characteristics.

APPLICATIONS

- Decals
- Labels
- Product identification

FEATURES AND BENEFITS

- Economical, quality film
- 2.0-mil clear polyester with #22 acrylic adhesive on a film liner.

TECHNICAL DATA

Face Material 2.0 mil polyester

Color and Finish Clear

Adhesive Permanent acrylic, #22 Liner 1.2-mil polyester

TYPICAL CHARACTERISTICS

Average Adhesion Values 15 min. 24 hr. (PSTC-1, 180° peel @ 12"/min., 73°F, on Stainless Steel) 3.2 lbs./inch 3.9 lbs./inch

Minimum Application Temperature 50°F

Service Temperature Range -65°F to +225°F

Shelf Life (@ 73°F, 50% RH)

Outdoor Life

2 years

2 years

CHEMICAL RESISTANCE

Distilled Water (24 hr)

Detergent (24 hr)

10% HC1 (10 min)

No Effect

10% Ammonium Hydroxide (10 min)

No Effect

Gasoline (1 hr)

No Effect

No Effect

The above information is based on research believed to be reliable, but does not constitute a warranty. All material should be tested by the purchaser to determine suitability of the product for their purposes.

Dec-02

Ritrama Inc. Minneapolis, MN 800 Kasota Ave. S.E. Minneapolis, MN 55414 Toll Free: 1-800-328-5071 Phone: 612-378-2277 Fax: 612-378-9327

341 Eddy Road Cleveland, OH 44108 Toll Free: 1-800-328-5071 Phone: 216-851-2300 Fax: 216-851-1938 Email: info@ritrama.com

Ritrama Inc. Cleveland, OH

Email: info@ritrama.com Email: info@ritrama.com Warehouses: Chino, CA-Orlando, FL-Wichita, KS-Seekonk, MA- Cleveland, OH





PRODUCT CODE: 3-7742

PRODUCTION DESCRIPTION

3.5-mil flexible frosty-clear vinyl is an intermediate vinyl overlaminate film designed to protect and enhance images and graphics. Product is also designed to inhibit UV light absorption.

APPLICATIONS

- General overlaminates
- Decals
- Labels
- Point of purchase displays

FEATURES AND BENEFITS

3.5-mil frosty-clear flexible vinyl, 07UV adhesive, 50# glassine liner

TECHNICAL DATA

Face Material 3.5-mil flexible vinyl Frosty-Clear Color and Finish

Adhesive 07UV overlaminating permanent acrylic

Liner 50# bleached glassine

TYPICAL CHARACTERISTICS

Target Adhesion Values 15 min. 24 hr. (PSTC-1, 180° peel @ 12"/min., 73°F, on Stainless Steel) 65 oz. 90 oz. 50°F Minimum Application Temperature -40°F to +180°F Service Temperature Range Shelf Life (@ 73°F, 50% RH) 2 years

CHEMICAL RESISTANCE

Distilled Water (24 hr) No Effect Detergent (24 hr) No Effect 10% HCl (10 min) N/A 10% Ammonium Hydroxide (10 min) No Effect Anti-Freeze (24 hr) No Effect SAE 20 Motor Oil (24 hr) No Effect Gasoline (1 hr) Noticeable Lifting

The above information is based on research believed to be reliable, but does not constitute a warranty. All material should be tested by the purchaser to determine suitability of the product for their purposes.

Mar-04 Form 108-01 (1/99)

> Ritrama Inc. Minneapolis, MN 800 Kasota Ave. S.E. Minneapolis, MN 55414 Toll Free: 1-800-328-5071 Phone: 612-378-2277 Fax: 612-378-9327 Email: info@ritrama.com



866 971-1008

PRODUCT CODE: 3-7841 RI-121/200

PRODUCT DESCRIPTION

Ideal for long-term durability, this overlaminate product is an excellent choice for high volume and extended floor graphics applications. This product is offered on a film liner for excellent wet out resistance. Use Media 3-9109 (Matte) or 3-7837 (Gloss) or 3-7836 (Gloss Clear) for better image enhancement.

APPLICATIONS

- Floor graphics
- Counter mats

FEATURES AND BENEFITS

Clear scuff and slip resistant vinyl

TECHNICAL DATA

Face Material 5.0-mil Vinyl Color and Finish Slip Resistant Clear FG, Permanent acrylic Adhesive Liner 1.2-mil polyester

TYPICAL CHARACTERISTICS

Target Adhesion Values 15 min. <u>24 hr.</u> (PSTC-1, 180° peel @ 12"/min., 73°F, on Stainless Steel) 104 oz. 139 oz. 50°F Minimum Application Temperature -40°F to +180°F Service Temperature Range Shelf Life (@ 73°F, 50% RH) 2 years Outdoor Life For indoor use only Flammability Self-Extinguishing

CHEMICAL RESISTANCE

Distilled Water (24 hr) No Effect No Effect Detergent (24 hr) 10% HC1 (10 min) N/A 10% Ammonium Hydroxide (10 min) No Effect No Effect Gasoline (1 hr)

The above information is based on research believed to be reliable, but does not constitute a warranty. All material should be tested by the purchaser to determine suitability of the product for their purposes. Sep-09

> Ritrama Inc. Minneapolis, MN 800 Kasota Ave. S.E. Minneapolis, MN 55414 Toll Free: 1-800-328-5071 Phone: 612-378-2277 Fax: 612-378-9327 Email: info@ritrama.com



866 971-1008

PRODUCT CODE: 3-8270

PRODUCT DESCRIPTION

3.5-mil flexible luster clear vinyl is an intermediate vinyl overlaminate film designed to protect and enhance images and graphics. Product is also designed to inhibit UV light absorption.

APPLICATIONS

- Protection of images and graphics
- Point of purchase displays
- Promotional displays
- Product identification graphics

FEATURES AND BENEFITS

- Overlaminate inhibits UV light absorption
- Protects your images and graphics

TECHNICAL DATA

Face Material 3.5-mil flexible vinyl

Color and Finish Luster clear

Adhesive 07UV, overlaminating permanent acrylic

Liner 90# polycoated bleached layflat

TYPICAL CHARACTERISTICS

Average Adhesion Values 15 min. 24 hr. (PSTC-1, 180° peel @ 12"/min., 73°F, on Stainless Steel) 50 oz. 75 oz. 50°F

Minimum Application Temperature

Service Temperature Range -40°F to +180°F

Shelf Life (@, 73°F, 50% RH) 2 years

UV Block (spectrophotometer) $100\% \ 200 \ nm - 360 \ nm$ 80% 360 nm - 400 nm

CHEMICAL RESISTANCE

No Effect Distilled Water (24 hr) Detergent (24 hr) No Effect 10% HCl (10 min) No Effect 10% Ammonium Hydroxide (10 min) No Effect Anti-Freeze (24 hr) No Effect SAE 20 Motor Oil (24 hr) No Effect No Effect Gasoline (1 hr)

The above information is based on research believed to be reliable, but does not constitute a warranty. All material should be tested by the purchaser to determine suitability of the product for their purposes. Sep-09

> Ritrama Inc. Minneapolis, MN 800 Kasota Ave. S.E. Minneapolis, MN 55414 Toll Free: 1-800-328-5071 Phone: 612-378-2277 Fax: 612-378-9327 Email: info@ritrama.com







PERFORMANCE FLOOR TALKER PRODUCT CODE: 3-8621

PRODUCTION DESCRIPTION

Ideal for long-term durability, this overlaminate product is an excellent choice for high volume and extended floor graphics applications. This product is offered on a film liner for excellent wet out and is UL-410 classified for slip resistance.

APPLICATIONS

- Floor graphics
- Counter graphics

FEATURES AND BENEFITS

- UL-Classified product: file number MH14249.
- 5.0-mil clear scuff and slip resistant vinyl.
- Laminates without silvering on most UV inkjet prints while maintaining a high bond

TECHNICAL DATA

Face Material 5.0-mil vinyl Color and Finish Slip resistant clear Adhesive FG, Permanent solvent Liner 1.2-mil polyester

TYPICAL CHARACTERISTICS

Target Adhesion Values 24 hr. 15 min. (PSTC-1, 180° peel @ 12"/min., 73°F, on Stainless Steel) 140 oz. 165 oz. 50°F Minimum Application Temperature -40°F to +180°F Service Temperature Range Shelf Life (@, 73°F, 50% RH) 2 years Indoor Life Up to 1 year Outdoor Life 30 days Flammability Self-Extinguishing

CHEMICAL RESISTANCE

Distilled Water (24 hr) No Effect No Effect Detergent (24 hr) 10% HC1 (10 min) N/A 10% Ammonium Hydroxide (10 min) No Effect No Effect Gasoline (1 hr)





The above information is based on research believed to be reliable, but does not constitute a warranty. All material should be tested by the purchaser to determine suitability of the product for their purposes. May-14

Ritrama Inc. Minneapolis, MN

800 Kasota Ave. S.E. Minneapolis, MN 55414 Toll Free: 1-800-328-5071 Phone: 612-378-2277 Fax: 612-378-9327

Email: info@ritrama.com
USA- Italy- Spain- UK- Switzerland- Ukraine- Poland- Mexico- Chile- China -Guatemala - Costa Rica - Colombia

Ritrama Inc. Cleveland, OH

341 Eddy Road Cleveland, OH 44108 Toll Free: 1-800-328-5071 Phone: 216-851-2300 Fax: 216-851-1938





ULTRA LUSTER UV PRODUCT CODE: 3-8750

PRODUCTION DESCRIPTION

3.5-mil premium calendered vinyl consists of a flexible, semi-gloss film having excellent weathering and aging characteristics. Features a permanent acrylic adhesive with ultra-violet inhibitors. Ideal for use as an overlaminating film where a semi-gloss look is desired.

APPLICATIONS

- Decorative trim
- Production identificatin pieces
- Point of purchase displays
- Window decals

FEATURES AND BENEFITS

3.5 mil semi-gloss clear premium vinyl, permanent acrylic adhesive, 50# bleached glassine

TECHNICAL DATA

Face Material 3.5-mil premium calendered vinyl

Color and Finish Semi-gloss Clear Adhesive Permanent acrylic Liner 50# bleached glassine

TYPICAL CHARACTERISTICS

Average Adhesion Values 15 min. 24 hr. (PSTC-1, 180° peel @ 12"/min., 73°F, on Stainless Steel) 50 oz. 75 oz. 50°F Minimum Application Temperature

-40°F to +180°F Service Temperature Range

Shelf Life (@ 73°F, 50% RH) 2 years Outdoor Durability 5 years

CHEMICAL RESISTANCE

Distilled Water (24 hr) No Effect Detergent (24 hr) No Effect 10% HCl (10 min) No Effect 10% Ammonium Hydroxide (10 min) No Effect Anti-Freeze (24 hr) No Effect SAE 20 Motor Oil (24 hr) No Effect Gasoline (1 hr) No Effect

The above information is based on research believed to be reliable, but does not constitute a warranty. All material should be tested by the purchaser to determine suitability of the product for their purposes.

Dec-10

Ritrama Inc. Minneapolis, MN 800 Kasota Ave. S.E. Minneapolis, MN 55414 Toll Free: 1-800-328-5071 Phone: 612-378-2277 Fax: 612-378-9327 Email: info@ritrama.com





ULTIMATE OPTICALLY CLEAR **PRODUCT CODE: 3-8957**

Product 3-8957 is a high gloss clear 2-mil cast vinyl film with a polyester liner, which can be used for overlaminating other vinyl films. The superb clarity of the cast vinyl film and of the acrylic adhesive are enhanced by the smooth polyester liner to keep the image sharp and clear.

- Vehicle graphics
- Window graphics
- Protects and enhances images and graphics

FEATURES AND BENEFITS

- 2-mil cast vinyl film offers the maximum flexibility.
- Stabilized vinyl film offers excellent protection from UV radiation to enhance the weathering of the underlying graphics.
- The overlaminate adhesive wets out quickly to provide a clean image.

TECHNICAL DATA

Face Material 2 mil premium cast vinyl

Color and Finish Clear – gloss Adhesive Permanent acrylic Liner 1.2 mil polyester

TYPICAL CHARACTERISTICS

<u>24 hr.</u> Average Adhesion Values 20 min. (PSTC-1, 180° peel @ 12"/min., 73°, on stainless steel) 32oz/in. 50oz/in. 50°F Minimum Application Temperature:

Service Temperature Range: -50°F to 225°F

Peak Value

Shelf Life @ 73°, 50% RH: 2 years Dimensional Stability (48 hrs. @ 150°F) 0.01 inches Outdoor Life of film: 5 years 60° Gloss 80 minimum

CHEMICAL RESISTANCE

Distilled Water (24 hours) No Effect Detergent (24 hours) No Effect 10% Ammonium Hydroxide (10 min) No Effect Gasoline (10 minutes) No Effect SAE 30 Motor Oil (10 minutes) No Effect

The above information is based on research believed to be reliable, but does not constitute a warranty. All material should be tested by the purchaser to determine suitability of the product for their purposes. Jun-12

> Ritrama Inc. Minneapolis, MN 800 Kasota Ave. S.E. Minneapolis, MN 55414 Toll Free: 1-800-328-5071 Phone: 612-378-2277 Fax: 612-378-9327

Ritrama Inc. Cleveland, OH 341 Eddy Road Cleveland, OH 44108 Toll Free: 1-800-328-5071 Phone: 216-851-2300 Fax: 216-851-1938 Email: info@ritrama.com

Email: info@ritrama.com Locations: USA, Italy, Spain, United Kingdom, Switzerland, Ukraine, Poland, Mexico, Chile, China, Guatemala, Costa Rica