



## ULTIMATE OPAQUE WRAP X PRODUCT CODE: 3-2360

### PRODUCT DESCRIPTION

The film is a gloss white flexible cast vinyl with a primed gray repositionable adhesive on the backside and our Licensed Air Flow Release Liner™ for easier, faster graphics installation. The premium high performance, flexible cast vinyl is ideal for application to irregular surfaces. The media is solvent, eco-sol and UV ink jet printable.

### APPLICATIONS

- Vehicle wraps
- Bus graphics
- Fleet graphics

### FEATURES AND BENEFITS

- Licensed Air Flow Release Liner™ for reduced wrinkling and air bubbles
- 7 year outdoor durable gloss white flexible vinyl
- Solvent repositionable semi-permanent adhesive

### TECHNICAL DATA

|   |  |
|---|--|
| Film Caliper                              | 2.0-mil.   |
| Adhesive                                  | 560, repositionable semi-permanent adhesive                            |
| Release Liner                             | 90# patterned Licensed Air Flow Release Liner™                         |
| Processability                            | Steele rule, thermal and rotary die-cutting & computerized sign making |
| Outdoor Durability of Film                | 7 Years vertical exposure in a temperate climate                       |
| Minimum substrate application temperature | 55° F  |
| Service temperature range (Peak values)   | -50°F to +225°F  |

### TYPICAL CHARACTERISTICS

|  |                |               |
|--|----------------|---------------|
| Adhesion Values  | <u>20 min.</u> | <u>24hrs.</u> |
| (Stainless steel substrate 180° peel @ 10"/min, 73° F) | 24 oz/in       | 30 oz/in      |
| Shelf Life (@ 73° F, 50% R.H.)                         | 1 Year         |               |
| Elongation   | 120%           |               |
| 60° Gloss  | 80 minimum     |               |
| Dimensional Stability(48 Hrs. @ 150° F)                | 0.01 in        |               |

### CHEMICAL RESISTANCE

|                           |           |
|---------------------------|-----------|
| Distilled Water (24 Hrs.) | No Effect |
| SAE 20 Motor Oil ( 1 Hr.) | No Effect |
| Gasoline ( 30 Min.)       | No Effect |
| 10% HCL ( 10 Min.)        | No Effect |
| 10% NH4OH (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-13

Form 108-01 (1/99)

RITRAMA RI WRAP



## FLEET WRAP PRODUCT CODE: 3-2405

### PRODUCTION DESCRIPTION

2.0 mil white cast vinyl is a high gloss formulated cast vinyl designed to optimize solvent ink jet printing. The cast vinyl promotes consistent ink dot size to optimize print color and quality. The solvent inks show excellent drying and anchoring properties to the film.

### APPLICATIONS

- Computerized sign-making
- Decals
- Decorative striping
- Product identification
- Service station markings
- Transportation markings and graphics
- Warning labels

### FEATURES AND BENEFITS

- The film is a premium high-performance, flexible cast vinyl for application to irregular surfaces.
- Gray primer and permanent adhesive for block out.

### TECHNICAL DATA

|                  |                                  |
|------------------|----------------------------------|
| Face Material    | 2.0 mil cast vinyl               |
| Color and Finish | Gloss white                      |
| Adhesive         | 480, Permanent acrylic           |
| Liner            | 90# polycoated two sides layflat |

### TYPICAL CHARACTERISTICS

|  |                 |               |
|--|-----------------|---------------|
| Average Adhesion Values                                  | <u>20 min.</u>  | <u>24 hr.</u> |
| (PSTC-1, 180° peel @ 10"/min., 73°F, on Stainless Steel) | 45 oz.          | 64 oz.        |
| Minimum Application Temperature                          | 40°F            |               |
| Service Temperature Range                                | -50°F to +200°F |               |
| Elongation   | 120%            |               |
| 60° Gloss  | 80 minimum      |               |
| Dimensional Stability (48 hrs. @150°F)                   | 0.01 in         |               |
| Shelf Life (@ 73°F, 50% RH)                              | 1 year          |               |
| Outdoor Durability                                       | 7 years         |               |

### CHEMICAL RESISTANCE

|                         |           |
|-------------------------|-----------|
| Distilled Water (24 hr) | No Effect |
| 10% HCl (10 min)        | No Effect |
| SAE 20 Motor Oil        | No Effect |
| Gasoline (1hr)          | No Effect |
| 10% NH4oh (10 min)      | No Effect |

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

Jul-13

Form 108-01 (1/99)



## GLOSS WRAP BO X PRODUCT CODE: 3-2422

### PRODUCT DESCRIPTION

Gloss white flexible vehicle wrap vinyl with repositionable gray-pigmented adhesive with Licensed Air Flow Release Liner™ for easier, faster graphics installation. Solvent, eco-sol, latex and UV ink jet printable.

### APPLICATIONS

- Vehicle wraps
- Bus graphics
- Fleet graphics

### FEATURES AND BENEFITS

- Licensed Air Flow Release Liner™ for reduced wrinkling and air bubbles
- 7 year outdoor durable gloss white flexible vinyl
- Clean removing solvent gray removable adhesive

### TECHNICAL DATA

|                  |   |
|------------------|---|
| Face Material    | 2.4-mil flexible calendered vinyl               |
| Color and Finish | White gloss                                     |
| Adhesive         | 27, gray pigmented removable solvent (1.5-mils) |
| Liner            | 90# patterned Licensed Air Flow Release Liner™  |

### TYPICAL CHARACTERISTICS

|  |                 |               |
|--|-----------------|---------------|
| Target Adhesion Values                                   | <u>15 min.</u>  | <u>24 hr.</u> |
| (PSTC-1, 180° peel @ 12"/min., 73°F, on Stainless Steel) | 1.5 lbs.        | 2.5 lbs.      |
| Minimum Application Temperature                          | 50°F            |               |
| Service Temperature Range                                | -40°F to +180°F |               |
| Shelf Life (@ 73°F, 50% RH)                              | 1 years         |               |
| Outdoor Durability (ASTM G53)                            | 7 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 |

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Jul-13 Form 108-01 (1/99)



## ULTIMATE GLOSS WRAP X PRODUCT CODE: 3-2437

### PRODUCT DESCRIPTION

Gloss white flexible vehicle wrap cast vinyl with repositionable gray-pigmented adhesive with Licensed Air Flow Release Liner™ for easier, faster graphics installation. The film is a premium high performance, flexible cast vinyl for application to irregular surfaces. Solvent, eco-sol, latex and UV ink jet printable.

### APPLICATIONS

- Vehicle wraps
- Bus graphics
- Fleet graphics

### FEATURES AND BENEFITS

- Licensed Air Flow Release Liner™ for reduced wrinkling and air bubbles
- 7 year outdoor durable gloss white flexible vinyl

### TECHNICAL DATA

|  |   |
|--|---|
| Film Caliper                               | 2-mil   |
| Adhesive                                   | 560, semi-permanent gray-pigmented solvent adhesive       |
| Release Liner                              | 90# polycoated two sides Licensed Air Flow Release Liner™ |
| Outdoor Durability of Film                 | 7 years vertical exposure in a temperate climate          |
| Minimum substrate application temperature  | 55° F   |
| Service temperature range<br>(Peak values) | -50°F to +225°F   |

### TYPICAL CHARACTERISTICS

|  |                |               |
|--|----------------|---------------|
| Adhesion Values  | <u>20 min.</u> | <u>24hrs.</u> |
| (Stainless steel substrate 180° peel @ 10"/min, 73° F) | 24 oz/in       | 30 oz/in      |
| Shelf Life (@ 73° F, 50% R.H.)                         | 1 Year         |               |
| Elongation   | 120%           |               |
| 60° Gloss  | 80 minimum     |               |
| Dimensional Stability(48 Hrs. @ 150° F)                | 0.01 in        |               |

### CHEMICAL RESISTANCE

|                           |           |
|---------------------------|-----------|
| Distilled Water (24 Hrs.) | No Effect |
| SAE 20 Motor Oil ( 1 Hr.) | No Effect |
| Gasoline ( 30 Min.)       | No Effect |
| 10% HCL ( 10 Min.)        | No Effect |
| 10% NH4OH (10 Min.)       | No Effect |

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May-14

Form 108-01 (1/99)



## ULTIMATE LUSTER WRAP X PRODUCT CODE: 3-2438

### PRODUCT DESCRIPTION

The film is a luster white flexible cast vinyl with gray repositionable adhesive on the backside and our Licensed Air Flow Release Liner™ for easier, faster graphics installation. The premium high performance, flexible cast vinyl is ideal for application to irregular surfaces. The media is solvent, eco-sol, latex and UV ink jet printable.

### APPLICATIONS

- Vehicle wraps
- Bus graphics
- Fleet graphics

### FEATURES AND BENEFITS

- Licensed Air Flow Release Liner™ for reduced wrinkling and air bubbles
- 7 year outdoor durable gloss white flexible vinyl
- Solvent repositionable semi-permanent adhesive

### TECHNICAL DATA

|   |  |
|---|--|
| Film Caliper                              | 2.0-mil  |
| Adhesive                                  | 560, repositionable semi-permanent adhesive                            |
| Release Liner                             | 90# patterned Licensed Air Flow Release Liner™                         |
| Processability                            | Steele rule, thermal and rotary die-cutting & computerized sign making |
| Outdoor Durability of Film                | 7 years vertical exposure in a temperate climate                       |
| Minimum substrate application temperature | 55° F  |
| Service temperature range (Peak values)   | -50°F to +225°F  |

### TYPICAL CHARACTERISTICS

|  |                |               |
|--|----------------|---------------|
| Adhesion Values  | <u>20 min.</u> | <u>24hrs.</u> |
| (Stainless steel substrate 180° peel @ 10"/min, 73° F) | 24 oz./in.     | 30 oz./in.    |
| Shelf Life (@ 73° F, 50% R.H.)                         | 1 Year         |               |
| Elongation   | 120%           |               |
| 60° Gloss  | 80 minimum     |               |
| Dimensional Stability(48 Hrs. @ 150° F)                | 0.01 in        |               |

### CHEMICAL RESISTANCE

|                           |           |
|---------------------------|-----------|
| Distilled Water (24 Hrs.) | No Effect |
| SAE 20 Motor Oil ( 1 Hr.) | No Effect |
| Gasoline ( 30 Min.)       | No Effect |
| 10% HCL ( 10 Min.)        | No Effect |
| 10% NH4OH (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.

May-12

Form 108-01 (1/99)



## LUSTER WRAP LOGO X PRODUCT: 3-3515

### PRODUCT DESCRIPTION

The 2.0-mil matte white cast vinyl is a specially formulated cast vinyl designed to optimize ink jet printing. The cast vinyl promotes consistent ink dot size to optimize print color and quality. The surface is ink jet printable with solvent, eco-solvent, and UV inks. Many print profiles are available. The film is a premium high performance flexible cast vinyl for application to irregular surfaces. It is used for recreational vehicle, fleet, marine, automotive, service stations and architectural signage applications. The adhesive is gray for increased opacity and blockout. During film removal from a substrate, heat or chemicals should be used.

### APPLICATIONS

- Automotive

### FEATURES AND BENEFITS

- Texture liner has a special embossed pattern that produces channels in the adhesive.
- The pattern helps reduce application time and improve the appearance of the applied film.

### TECHNICAL DATA

|                  |   |
|------------------|---|
| Face Material    | 2.0-mil Cast Vinyl                                |
| Color and Finish | White with Luster Gloss finish                    |
| Adhesive         | Permanent Gray Acrylic                            |
| Liner            | 90# Polycoated two-side printed air release liner |

### TYPICAL CHARACTERISTICS

|  |  |               |
|--|--|---------------|
| Average Adhesion Values                                  | <u>20 min.</u>   | <u>24 hr.</u> |
| (PSTC-1, 180° peel @ 10"/min., 73°F, on Stainless Steel) | 28 oz.   | 34 oz.        |
| Minimum Application Temperature                          | 55°F   |               |
| Service Temperature Range (peak values)                  | -50°F to +225°F  |               |
| Elongation   | 120%   |               |
| Dimensional Stability (48 hrs. @ 150°F)                  | .01"   |               |
| Shelf Life (@ 73°F, 50% RH)                              | 1 year   |               |
| Outdoor Life   | 7 years for vertical exposure in a temperate climate. Exposures less than vertical or in hot climates or near sources of heat such as engines will reduce durability |               |

### CHEMICAL RESISTANCE

|                                  |           |
|----------------------------------|-----------|
| Distilled water (24 hrs)         | No effect |
| SAE 20 motor oil (1hr)           | No effect |
| Gasoline (30 min.)               | No effect |
| 10% HCL (10 min.)                | No effect |
| 10% NH <sub>4</sub> OH (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.  
August-12 Form 108-01 (1/99)





**GLOSS WRAP LOGO X**  
**PRODUCT: 3-3559**

**PRODUCT DESCRIPTION**

The 2.0-mil white cast vinyl is a specially formulated cast vinyl designed to optimize ink jet printing. The cast vinyl promotes consistent ink dot size to optimize print color and quality. The surface is inkjet printable with solvent, eco-solvent, latex and UV inks. Many print profiles are available. The film is a premium high performance, flexible cast vinyl for application to irregular surfaces. The solvent adhesive is gray for increased opacity and blockout. During film removal from a substrate, heat or chemicals should be used.

**APPLICATIONS**

- Vehicle wraps, signage

**FEATURES AND BENEFITS**

- Texture liner has a special embossed pattern that produces channels in the adhesive.
- The pattern helps reduce application time and improve the appearance of the applied film.

**TECHNICAL DATA**

|                  |   |
|------------------|---|
| Face Material    | 2.0-mil Cast Vinyl                                      |
| Color and Finish | White with High Gloss finish                            |
| Adhesive         | ASP33C, Semi-permanent Gray solvent                     |
| Liner            | 90# Polycoated two sides Ritrama Air Flow Release liner |

**TYPICAL CHARACTERISTICS**

|  |  |               |
|--|--|---------------|
| Average Adhesion Values                                  | <u>20 min.</u>   | <u>24 hr.</u> |
| (PSTC-1, 180° peel @ 10"/min., 73°F, on Stainless Steel) | 28 oz.   | 34 oz.        |
| Minimum Application Temperature                          | 55°F   |               |
| Service Temperature Range (peak values)                  | -50°F to +225°F  |               |
| Elongation   | 120%   |               |
| Dimensional Stability (48 hrs. @ 150°F)                  | .01"   |               |
| Shelf Life (@ 73°F, 50% RH)                              | 1 year   |               |
| Outdoor Life   | 7 years for vertical exposure in a temperate climate. Exposures less than vertical or in hot climates or near sources of heat such as engines will reduce durability |               |

**CHEMICAL RESISTANCE**

|                          |           |
|--------------------------|-----------|
| Distilled water (24 hrs) | No effect |
| SAE 20 motor oil (1hr)   | No effect |
| Gasoline (30 min.)       | No effect |
| 10% HCL (10 min.)        | No effect |
| 10% NH4OH (10 min.)      | No effect |

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May-14 Form 108-01 (1/99)



**RI-VISION LAMINATE**  
**CLEAR URETHANE WRAP LAMINATE**  
**PRODUCT CODE: 3-3585**

**PRODUCT DESCRIPTION**

3-3585 Clear Urethane is a durable, high gloss, high performance product designed for overlaminating wrap applications. The permanent solvent adhesive offers a high ultimate adhesion and excellent clarity. The film can be applied to curved and some recessed surfaces and offers a green choice alternative over PVC for wrap application. The urethane provides superior abrasion resistance.

**APPLICATIONS**

- Vehicle/ Fleet Wraps, Watercraft, Railroad Cars, Outdoor Signage
- Vehicle Accents

**FEATURES AND BENEFITS**

- Easy to apply, conformable
- Environmentally friendly
- Superior Scuff Resistance
- Excellent low-temperature flexibility & cold-crack resistance

**TECHNICAL DATA**

|                  |                               |
|------------------|-------------------------------|
| Face Material    | 2 mil (50 micron) urethane    |
| Color and Finish | Clear, High Gloss             |
| Adhesive         | Permanent Solvent, UV         |
| Liner            | 1.5-mil Polyester back coated |

**TYPICAL CHARACTERISTICS**

|  |   |               |
|--|---|---------------|
| Average Adhesion Values                                  | <u>20 min.</u>  | <u>24 hr.</u> |
| (PSTC-1, 180° peel @ 10"/min., 72°F, on Stainless Steel) | 32 oz.  | 50 oz.        |
| Minimum Application Temperature                          | 60°F  |               |
| Service Temperature Range (Peak Values)                  | -40°F to +200°F   |               |
| Elongation   | >150%   |               |
| Dimensional Stability (48 hrs. @ 150°F)                  | .01"  |               |
| Shelf Life (@ 72°F, 50% RH)                              | 1 year  |               |
| Outdoor Life   | 9 years for vertical exposure in a temperate climate. Exposures less than vertical or in hot climates will reduce durability. |               |

**CHEMICAL RESISTANCE**

|                             |           |
|-----------------------------|-----------|
| Distilled Water (24 hrs.)   | No effect |
| Water & detergent (24 hrs.) | No effect |
| SAE 30 motor oil (1 hr.)    | No effect |
| Gasoline (30 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.  
Nov-13 Form 108-01 (1/99)

RI-LAM

RITRAMA





## RI-VISION GLOSS WHITE URETHANE WRAP PRODUCT CODE: 3-3679

### PRODUCT DESCRIPTION

3-3679 White Urethane is a durable, high gloss, high performance product designed for wrap/fleet applications. This flexible, tough film with its positionable semi-permanent adhesive and Ritrama's licensed Air Flow Release liner™ is ideal for difficult wrap/fleet applications. The film can be applied to curved and some recessed surfaces. Heat and adhesion promoter may be needed in some areas. The film is printable with digital inks (See page 2 for profiles) and offers a green choice alternative over PVC for wrap application. The urethane provides superior abrasion resistance for longer graphic life. The block-out adhesive provides excellent opacity. Use overlamine 3-3585

### APPLICATIONS

- Vehicle/ Fleet Wraps, Watercraft, Railroad Cars, Outdoor Signage
- Vehicle accents

### FEATURES AND BENEFITS

- Easy to apply, conformable
- Environmentally friendly
- Superior scuff resistance
- Excellent solvent, eco-sol and latex printability. See backside for profiles
- Excellent low-temperature flexibility, cold crack resistance

### TECHNICAL DATA

|                  |  |
|------------------|--|
| Face Material    | 2 mil (50 micron) urethane                   |
| Color and Finish | White, High Gloss                            |
| Adhesive         | 1.2 positionable semi-permanent gray solvent |
| Liner            | Air Flow Release Liner™                      |

### TYPICAL CHARACTERISTICS

|  |   |               |
|--|---|---------------|
| Average Adhesion Values                                  | <u>20 min.</u>  | <u>24 hr.</u> |
| (PSTC-1, 180° peel @ 10"/min., 72°F, on Stainless Steel) | 25 oz.  | 40 oz.        |
| Minimum Application Temperature                          | 60°F  |               |
| Service Temperature Range (Peak Values)                  | -40°F to +200°F   |               |
| Elongation   | >150%   |               |
| Dimensional Stability (48 hrs. @ 150°F)                  | .01"  |               |
| Shelf Life (@ 72°F, 50% RH)                              | 1 year  |               |
| Outdoor Life   | 11 years for vertical exposure<br>non-printed in a temperate climate.<br>Exposures less than vertical or in hot<br>climates will reduce durability. |               |

### CHEMICAL RESISTANCE

|                             |           |
|-----------------------------|-----------|
| Distilled Water (24 hrs.)   | No effect |
| Water & detergent (24 hrs.) | No effect |
| SAE 30 motor oil (1 hr.)    | No effect |
| Gasoline (30 min.)          | No effect |

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Nov-13

Form 109-01 (1/00)

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# AVAILABLE DIGITAL PRINTING PROFILES

| Printer Manufacturer | Printer Model  | Ink               | Ink Config   | Ink Type     | RIP                     | Resolution |
|----------------------|--|-------------------|--------------|--------------|-------------------------|------------|
| Epson                | Stylus Pro GS6000  | UltraChorme GS    | CMYKcmOG     | Eco-Solvent  | CSE Colorburst 9.2      | 720x720    |
| Epson                | Stylus Pro GS6000  | UltraChromeGS     | CMYKcmOG     | Eco-Solvent  | Onyx 10.2.5             | 720x720    |
| Epson                | SureColor S30670   | UltraChrome GS2   | CMYK         | Eco-Solvent  | Onyx 10.2.5             | 720x1440   |
| Hewlett Packard      | DesignJet L25500 (42")                                   | HP 789            | CMYKcm       | Latex        | Onyx 10.2.5             | 600x600    |
| Hewlett Packard      | DesignJet L25500 (42")                                   | HP 789            | CMYKcm       | Latex        | SAi FlexiSIGN 10.5.1    | 600x600    |
| Hewlett Packard      | DesignJet L25500 (60")                                   | HP 789            | CMYKcm       | Latex        | Onyx 10.2.5             | 600x600    |
| Hewlett Packard      | DesignJet L25500 (60")                                   | HP 789            | CMYKcm       | Latex        | SAi FlexiSIGN 10.5.1    | 600x600    |
| Hewlett Packard      | DesignJet L26500   | HP 792            | CMYKcm       | Latex        | Onyx 10.2.5             | 600x600    |
| Hewlett Packard      | DesignJet L28500`  | HP 792            | CMYKcm       | Latex        | Onyx 10.2.5             | 600x600    |
| Mimaki               | CJV30 60   | SS21              | CMYK (x2)    | Mild Solvent | Onyx 10.2.5             | 540x1080   |
| Mimaki               | CJV30 60   | SS21              | CMYK (x2)    | Mild Solvent | SAi FlexiSIGN 10.5.1    | 540x1080   |
| Mimaki               | CJV30 100  | SS21              | CMYK (x2)    | Mild Solvent | Onyx 10.2.5             | 540x1080   |
| Mimaki               | CJV30 100  | SS21              | CMYK (x2)    | Mild Solvent | SAi FlexiSIGN 10.5.1    | 540x1080   |
| Mimaki               | CJV30 130  | SS21              | CMYK (x2)    | Mild Solvent | Onyx 10.2.5             | 540x1080   |
| Mimaki               | CJV30 130  | SS21              | CMYK (x2)    | Mild Solvent | SAi FlexiSIGN 10.5.1    | 540x1080   |
| Mimaki               | CJV30 160  | SS21              | CMYK (x2)    | Mild Solvent | Onyx 10.2.5             | 540x1080   |
| Mimaki               | CJV30 160  | SS21              | CMYK (x2)    | Mild Solvent | SAi FlexiSIGN 10.5.1    | 540x1080   |
| Mimaki               | CJV30 Series (CJV30 60, CJV30 100, CJV30 130, CJV30 160) | SS21              | CMYK (x2)    | Mild Solvent | Mimaki RasterLink Pro V | 540x1080   |
| Mimaki               | JV33 130   | SS21              | CMYK (x2)    | Mild Solvent | Onyx 10.2.5             | 540x1080   |
| Mimaki               | JV33 130   | SS21              | CMYK (x2)    | Mild Solvent | SAi FlexiSIGN 10.5.1    | 540x1080   |
| Mimkai               | JV33 160   | SS21              | CMYK (x2)    | Mild Solvent | Onyx 10.2.5             | 540x1080   |
| Mimaki               | JV33 160   | SS21              | CMYK (x2)    | Mild Solvent | SAi FlexiSIGN 10.5.1    | 54x1080    |
| Mimaki               | JV33 Series (JV33 130, JV33 160)                         | SS21              | CMYK (x2)    | Mild Solvent | Mimaki Rasterlink Pro V | 540x1080   |
| Mimaki               | ValueJet 1204  | Eco-Solvent Ultra | CMYK         | Eco-Solvent  | Onyx 10.2.5             | 720x720    |
| Mutoh                | ValueJet 1204  | Eco-Solvent Ultra | CMYK         | Eco-Solvent  | SAi FlexiSIGN 10.5.1    | 720x720    |
| Mutoh                | ValueJet 1204  | Eco-Solvent Ultra | CMYK         | Eco-Solvent  | Wasatch SoftRIP 7       | 720x720    |
| Mutoh                | ValueJet 1304  | Eco-Solvent Ultra | CMYK         | Eco-Solvent  | Onyx 10.2.5             | 720x720    |
| Mutoh                | ValueJet 1304  | Eco-Solvent Ultra | CMYK         | Eco-Solvent  | SAi FlexiSIGN 10.5.1    | 720x720    |
| Mutoh                | ValueJet 1304  | Eco-Solvent Ultra | CMYK         | Eco-Solvent  | Wasatch SoftRIP 7       | 720x720    |
| Mutoh                | ValueJet 1604  | Eco-Solvent Ultra | CMYK         | Eco-Solvent  | Onyx 10.2.5             | 720x720    |
| Mutoh                | ValueJet 1604  | Eco-Solvent Ultra | CMYK         | Eco-Soilvent | SAi FlexiSIGN 10.5.1    | 720x720    |
| Mutoh                | ValueJet 1604  | Eco-Solvent Ultra | CMYK         | Eco-Solvent  | Wasatch SoftRIP7        | 720x720    |
| Mutoh                | ValueJet 1614  | Eco-Solvent Ultra | CMYK         | Eco-Solvent  | Onyx 10.2.5             | 720x720    |
| Mutoh                | ValueJet 1614  | Eco-Solvent Ultra | CMYK         | Eco-Solvent  | SAi FlexiSIGN 10.5.1    | 720x720    |
| Mutoh                | ValueJet 1614  | Eco-Solvent Ultra | CMYK         | Eco-Solvent  | Wasatch SoftRIP 7       | 720x720    |
| Roland               | SolJet Pro 4 XF-640                                      | Eco-Sol MAX2      | CMYK         | Eco-Solvent  | Roalnd VersaWorks 4.9.1 | 720x1440   |
| Roland               | SolJet Pro 4 XR-640                                      | Eco-Sol MAX2      | CMYKLcLmLk   | Eco-Solvent  | Roland VersaWorks 4.9.1 | 720x1440   |
| Roalnd               | SolJet Pro 4 XR-640                                      | Eco-Sol MAX2      | CMYKLcLmLkMt | Eco-Solvent  | Roland VersaWorks 4.9.1 | 720x1440   |
| Roland               | SolJet Pro 4 XR-640                                      | Eco-Sol MAX2      | CMYKLcLmLkW  | Eco-Solvent  | Roland VersaWorks 4.9.1 | 720x1440   |
| Roland               | SolJet Pro 4 XR-640                                      | Eco-Sol MAX2      | CMYKLcLmWMT  | Eco-Solvent  | Roland VersaWorks 4.9.1 | 720x1440   |
| Roland               | SolJet Pro III XC-540                                    | Eco-Sol MAX       | CMYKLcLm     | Eco-Solvent  | Roland VersaWorks 4.9.1 | 720x1440   |
| Roland               | SolJet Pro III XJ Series (XJ-540, XJ-640, XJ-740)        | Eco-Sol MAX       | CMYKLcLm     | Eco-Solvent  | Roland VersaWorks 4.9.1 | 720x1440   |
| Roland               | VersaCAMM VS-540/640                                     | Eco-Sol MAX       | CMYK         | Eco-Solvent  | Roland VersaWorks 4.9.1 | 1440x720   |
| Roland               | VersaCAMM VS-540/640                                     | Eco-Sol MAX       | CMYKLcLmMC   | Eco-Solvent  | Roland VersaWorks 4.9.1 | 1440x720   |
| Roland               | VersaCAMM VS-540/640                                     | Eco-Sol MAX       | CMYKLcLmWMT  | Eco-Solvent  | Roland VersaWorks 4.9.1 | 1440x720   |



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**MATTE WRAP BOX**  
**PRODUCT CODE: 4-0403**

**PRODUCT DESCRIPTION**

Matte white flexible vehicle wrap vinyl with repositionable gray-pigmented adhesive with Licensed Air Flow Release Liner™ for easier, faster graphics installation.

**APPLICATIONS**

- Vehicle wraps
- Bus graphics
- Fleet graphics

**FEATURES AND BENEFITS**

- Licensed Air Flow Release Liner™ for reduced wrinkling and air bubbles
- 7 year outdoor durable matte white flexible vinyl
- Clean removing solvent gray removable solvent

**TECHNICAL DATA**

|                  |  |
|------------------|--|
| Face Material    | 2.4-mil flexible vinyl                         |
| Color and Finish | White matte                                    |
| Adhesive         | 27, gray pigmented removable acrylic           |
| Liner            | 90# patterned Licensed Air Flow Release Liner™ |

**TYPICAL CHARACTERISTICS**

|  |                            |                           |
|--|----------------------------|---------------------------|
| Target Adhesion Values<br>(PSTC-1, 180° peel @ 12"/min., 73°F, on Stainless Steel) | <u>15 min.</u><br>1.5 lbs. | <u>24 hr.</u><br>2.5 lbs. |
| Minimum Application Temperature  | 50°F                       |                           |
| Service Temperature Range  | -40°F to +180°F            |                           |
| Shelf Life (@ 73°F, 50% RH)  | 2 years                    |                           |
| Outdoor Durability (ASTM G53)  | 7 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.

Oct-11

Form 108-01 (1/99)

RITRAMA  
RI WRAP



## 500 SERIES OPAQUE WRAP CAST VINYL FILMS

### PRODUCT DESCRIPTION

Ritrama's 500 Series Opaque Wrap products is a series of bold colors with excellent durability, flexibility, and conformability. The 3.2 mil thickness and repositionable permanent adhesive with Ritrama's licensed Air Flow Release liner™ makes these high performance cast vinyls ideal for applying to compound curve surfaces. Heat and adhesion promoter may be needed in some areas. Many stock colors are available as well as custom colors.

### APPLICATIONS

- Vehicle/Fleet wraps
- Vehicle accents
- Interior and Exterior

### FEATURES AND BENEFITS

- Easy to apply
- Conformable
- Cast vinyl
- Roll to car ready

### TECHNICAL DATA

|                  |  |
|------------------|--|
| Face Material    | 3.2 mil cast vinyl   |
| Color and Finish | High gloss and matte finishes available                                      |
| Adhesive         | 1.2-mil repositionable permanent solvent adhesive featuring low initial tack |
| Liner            | Air flow release liner™  |

### TYPICAL CHARACTERISTICS

|   |   |                         |
|---|---|-------------------------|
| Average Adhesion Values<br>(PSTC-1, 180° peel @ 10"/min., 73°F, on Stainless Steel) | <u>20 min.</u><br>25 oz.  | <u>24 hr.</u><br>40 oz. |
| Minimum Application Temperature   | 60°F  |                         |
| Service Temperature Range (peak values)   | -40°F to +200°F   |                         |
| Elongation  | 100%  |                         |
| Dimensional Stability (48 hrs. @ 150°F)   | .02"  |                         |
| Shelf Life (@ 73°F, 50% RH)   | 1 year  |                         |
| Outdoor Life  | 5 years for vertical exposure in a temperate climate. Exposures less than vertical or in hot climates or near sources of heat such as engines will reduce durability. |                         |

### CHEMICAL RESISTANCE

|                             |           |
|-----------------------------|-----------|
| Distilled water (24 hrs.)   | No effect |
| Water & detergent (24 hrs.) | No effect |
| SAE 30 motor oil (1hr)      | No effect |
| Gasoline (30 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-13 Form 108-01 (1/99)

RITRAMA  
RI WRAP



## 500 SERIES OPAQUE WRAP CAST VINYL FILMS

| Product Code | Color Number | Description                 |
|--------------|--------------|-----------------------------|
| 3-3405       | 2591         | Hot Wheels Blue Wrap        |
| 3-3408       | 2612         | Burnout Black Wrap          |
| 3-3413       | 8754         | Kandy Red Wrap              |
| 3-3611       | 2712         | Silver Metallic Kandy Wrap  |
| 3-3567       | 2613         | TFR White Wrap              |
| 3-3398       | 2607         | British Racing Green Wrap   |
| 3-3400       | 2610         | Countach Green Wrap         |
| 3-3403       | 2587         | Formula One Red Wrap        |
| 3-3404       | 2590         | Modena Yellow Wrap          |
| 3-3406       | 2602         | Drifting Orange Wrap        |
| 3-3407       | 2608         | St. Moritz White Wrap       |
| 3-3608       | 2682         | Ultra Blue Wrap             |
| 3-3434       | 2425         | Matte Black Wrap            |
| 3-3412       | 2426         | Matte White Wrap            |
| 3-3435       | 2441         | Matte Military Green Wrap   |
| 3-3459       | 2458         | Matte Titanium Stealth Wrap |
| 3-3614       | 2683         | Matte Silver Metallic Wrap  |
| 3-3751       | 2732         | Matte Drifting Orange Wrap  |

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-13

Form 108-01 (1/99)



## 520 SERIES TEXTURED WRAP CAST VINYL FILMS

### PRODUCT DESCRIPTION

Ritrama's 520 Textured Wrap series is a wide ranging line of cast vinyl textures and colors with excellent durability, flexibility, and conformability. These eye catching patterns are ideal for customizing any vehicle or personal equipment. The patterns will also attract attention for wall graphics and advertising displays. The positionable adhesive with Ritrama's licensed Air Flow Release liner™ makes these high performance cast vinyls ideal for applying to compound curve surfaces. Heat and adhesion promoter may be needed in some areas. The custom adhesive is removable from many surfaces by using heat. Many stock colors are available as well as custom colors.

### APPLICATIONS

- Vehicle wraps
- Wall accents
- Interior decorating for home, car, RV, boat

### FEATURES AND BENEFITS

- Easy to apply
- Conformable cast vinyl

### TECHNICAL DATA

|                  |                                       |
|------------------|---------------------------------------|
| Face Material    | Cast vinyl                            |
| Color and Finish | Various textures and colors           |
| Adhesive         | 1.2-mil positionable solvent adhesive |
| Liner            | Air flow release liner™               |

### TYPICAL CHARACTERISTICS

|  |   |               |
|--|---|---------------|
| Average Adhesion Values                                  | <u>20 min.</u>  | <u>24 hr.</u> |
| (PSTC-1, 180° peel @ 10"/min., 73°F, on Stainless Steel) | 25 oz.  | 40 oz.        |
| Minimum Application Temperature                          | 60°F  |               |
| Service Temperature Range (peak values)                  | -40°F to +200°F   |               |
| Elongation   | 100%  |               |
| Dimensional Stability (48 hrs. @ 150°F)                  | .02"  |               |
| Shelf Life (@ 73°F, 50% RH)                              | 1 year  |               |
| Outdoor Life   | 5 years for vertical exposure in a temperate climate. Exposures less than vertical or in hot climates or near sources of heat such as engines will reduce durability. |               |

### CHEMICAL RESISTANCE

|                             |           |
|-----------------------------|-----------|
| Distilled water (24 hrs.)   | No effect |
| Water & detergent (24 hrs.) | No effect |
| SAE 30 motor oil (1hr)      | No effect |
| Gasoline (30 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.

Apr-13

Form 108-01 (1/99)



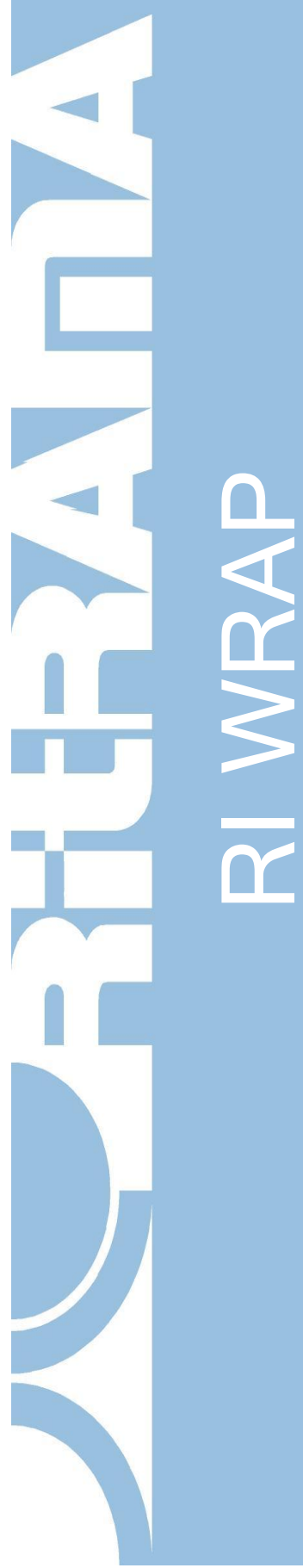


## 520 SERIES TEXTURED WRAP CAST VINYL FILMS

| Product Code   | Color Number | Description                        |
|----------------|--------------|------------------------------------|
| 3-3476         | 2488         | Carbon Fiber Wrap Black            |
| 3-3545         | 2444         | Carbon Fiber Wrap White            |
| 3-3347         | 2445         | Carbon Fiber Wrap Clear            |
| 3-3546         | 2446         | Carbon Fiber Wrap Anthracite       |
| 3-3402         | 2576         | Micro Carbon Fiber Wrap Black      |
| 3-3409 /3-3078 | 2334         | Carbon Fiber Diago Wrap Black      |
| 3-3410 /3-3268 | 2456         | Carbon Fiber Diago Wrap White      |
| 3-3348         | 2455         | Carbon Fiber Diago Wrap Clear      |
| 3-3411         | 2454         | Carbon Fiber Diago Wrap Anthracite |
| 3-3433         | 2447         | Brushed Wrap Silver                |
| 3-3573         | 2448         | Brushed Wrap Gold                  |
| 3-3432         | 2452         | Mamba Wrap Black                   |
| 3-3424         | 2460         | Mamba Wrap Beige                   |
| 3-3425         | 2451         | Mamba Wrap Red-Brown               |
| 3-3575         | 2475         | Ostrich Wrap Orange                |

Apr-13

Form 108-01 (1/99)





## CYBERKROME SERIES FILMS

### PRODUCT DESCRIPTION

Ritrama's Cyberkrome chrome film is a bright film designed specifically for partial vehicle wraps and for slightly curved surfaces. This material is available in bright silver, red, green, blue and yellow versions. Cyberkrome is supplied with Ritrama's ASP33 repositionable adhesive and the new micro-channel Airflow Release Liner™ for faster and easier application.

### APPLICATIONS

- Vehicle accents / Graphics
- Interior and Exterior use

### FEATURES AND BENEFITS

- Lack of wrinkling and air bubbles
- Repositionable adjustments can be made without damaging the film
- Ideal for slightly curved accent applications
- No channel impression on face film
- Roll to car ready

### TECHNICAL DATA

|                  |   |
|------------------|---|
| Face Material    | 2.8 mil chrome film   |
| Color and Finish | Bright chrome finish  |
| Adhesive         | ASP 33 repositionable permanent solvent adhesive featuring low initial tack |
| Liner            | Air flow release liner™   |

### TYPICAL CHARACTERISTICS

|  |   |               |
|--|---|---------------|
| Average Adhesion Values                                  | <u>20 min.</u>  | <u>24 hr.</u> |
| (PSTC-1, 180° peel @ 10"/min., 73°F, on Stainless Steel) | 25 oz.  | 40 oz.        |
| Minimum Application Temperature                          | 60°F  |               |
| Service Temperature Range (peak values)                  | -40°F to +200°F   |               |
| Elongation   | 50%   |               |
| Dimensional Stability (48 hrs. @ 150°F)                  | .02"  |               |
| Shelf Life (@ 73°F, 50% RH)                              | 1 year  |               |
| Outdoor Life   | 2 years for vertical exposure in a temperate climate. Exposures less than vertical or in hot climates or near sources of heat such as engines will reduce durability. |               |

### CHEMICAL RESISTANCE

|                             |           |
|-----------------------------|-----------|
| Distilled water (24 hrs.)   | No effect |
| Water & detergent (24 hrs.) | No effect |
| SAE 30 motor oil (1hr)      | No effect |
| Gasoline (30 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.  
Nov-13 Form 108-01 (1/99)

RI WRAP

RITRAMA





## CYBERKROME SERIES WRAP CAST VINYL FILMS

| <b>Product Code</b> | <b>Description</b>                                   |
|---------------------|--|
| 3-0113              | Cyberkrome Blue                                      |
| 3-0114              | Cyberkrome Red                                       |
| 3-0115              | Cyberkrome Green                                     |
| 3-0116              | Cyberkrome Yellow                                    |
| 3-0117              | Cybershield Silver – printable and scratch resistant |

All Rolls 60" x 25'

Ritrama accent Cyberchromes apply differently than Ritrama Cast Vinyl Wrap Films, please note the below application guidelines to ensure proper Cyberchrome accent applications:

- The applicator can use low heat temperatures when applying this multi-layer film.
- However if the temperature gets too high, the applicator could get wrinkles; do not exceed surface temperatures of 120 degrees Fahrenheit. When lifting the material to re-apply make sure equal stretching is applied in both directions of the film.
- At the end of the application give the film a general heating to relax the film and help it bond to the surface – not to exceed film temperature of 120 degrees Fahrenheit.
- Care should be taken to not scratch the surface of the Cyberchrome.
- The Cyberchrome will conform to simple curved surfaces but is ideal for flat accent decals.

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.

Nov-13

Form 108-01