Durable Print Solutions
PV500 VOID Polyester

Technical data **February, 2007**

Product Description

PV500 VOID Polyester is tamper indicating - designed to provide a VOID message in the facestock when removal is attempted. The compact format of the VOID message permits manufacture of small labels.

Physical Properties

Note: The following technical information and data should be considered representative or typical only and should not be used for specification purposes.

Facestock	56 micron Matte Silver VOID Polyester
Adhesive	20 micron permanent, high tack, UV stable acrylic adhesive
Liner	77 micron, 90 g/m² White Densified Glassine
Shelf Life	24 months from date of manufacture of product when properly stored between 22C and 50% relative humidity.

(Calipers are nominal values)

Key Features

- Tamper indicating - designed to provide a VOID message in the facestock when removal is attempted.
- Facestock is topcoated for thermal transfer printing. Resin ribbonsare recommended for optimum durability. The topcoat also provides improved ink anchorage for traditional forms of press printing.
- Permanent UV stable acrylic adhesive, formulated with high tack and high ultimate adhesion to most surfaces. Compatibility must be determined.
- The compact format of the VOID message permits manufacture of small labels.
- Durable polyester facestock for harsh environments.
- 90g/m² Glassine liner for consistent die cutting.
- UL and cUL recognized (File MH18072)

Application Ideas

- Barcode labels and rating plates
- Non transferable labels for automotive, appliance and electronics industries
- Tamper indicating labels and seals for medical and pharmaceutical industries

Adhesive Performance

Note: The following technical information and data should be considered representative or typical only anld not be used for specification purposes.

180° Peel Adhesion to Glass FINAT 1	6.8 N/10mm
Loop Tack to Glass FINAT 9	6.0 N/10mm

Physical Properties

Note: The following technical information and data should be considered representative or typical only and should not be used for specification purposes.

Environmental Performance	The topcoat is designed to have excellent resistance to UV, moisture & a wide variety of chemicals, e.g. diesel fuel, petroleum spirits, brake fluid, oil, anti-freeze, mild acids and alkalis, ethanol, IPA, hexane, water, soap solution.
Temperature Range	Short Term Service temperature -40 to 150°C Prolonged exposure to temperatures Exceeding 80°C may result in the full or partial non-functioning of the VOID destruct pattern. Minimum application temperature +5°C.

Processing

Printing: Facestock is topcoated for improved ink receptivity and is designed for thermal transfer printing. It is printable by all standard roll processing methods including flexography, hot stamp, letterpress, and screen printing.

Die Cutting: Rotary die cutting is recommended. Small labels should be evaluated carefully. Winding tensions should be kept at a minimum to help prevent the adhesive from oozing.

Packaging: Finished labels should be stored in plastic bags.

Special Considerations

NOTE:
When using solvents, read and follow the manufacturer's precautions and directions for use.

For maximum bond strength, the surface should be clean and dry.
Typical cleaning solvents are heptane and IPA.

For best bonding conditions, application surface should be at room temperature or higher. Low temperature surfaces, below 5°C can cause the adhesive to become so firm that it will not develop maximum contact with the substrate. Higher initial bonds can be achieved through increased rubdown pressure.

Care should be taken not to disturb the tamper indicating feature by pre-destructing the void pattern when manually removing the label from the liner. Slowly remove the liner from the label at a 90° angle.

The tamper indicating mechanism (i.e. the "VOID" message) depends upon adequate adhesion of the label to the substrate. A sufficient bond may not develop on all surfaces due to low surface energy or contaminated surfaces (mold release). Therefore, it is important to determine the suitability of PV500 in the intended application by carefully pre-testing before the application process has begun.

The primary function of PV500 VOID Polyester is to affect a non-transferable (non-reusable) label or seal by causing the VOID message pattern to appear on the facestock surface when removal is attempted.
As a result of the primary function described above the VOID message may also be transferred to the application surface. This message is a secondary rather than a permanent indication of tampering since the VOID message transferred to the application surface can be removed by rubbing or by solvent wiping.

Caution should be exercised to avoid covering the surface of the label with Opaque graphics to the extent that the VOID message is hidden by the graphics and the effectiveness of the label or seal is lessened.

For Additional Information	To request additional product information or to arrange for sales assistance, call +31 (0)35 - 601 69 41 or send an email to info@rebosystems.com
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