



PRODUCT INFORMATION



Product Description:

COMPUcal EXCEL roll-form products (20440, 21440 and 22440) and sheet-form products (20449, 21449 and 22449) are UL-recognized 2.0 mil matte topcoated cross technology printable (impact, laser*, electron beam, wax, resin and wax/resin thermal transfer) **clear, white** and **silver** polyester films coated with an aggressive, permanent pressure-sensitive acrylic adhesive, and backed with either a roll-form (S50K-8) or a sheet-form (Patented† 91 PRT PFW) release liner.

- PM 200 Clear & White, MM 200 Silver..... 2.0 mil clear, white and silver polyester films designed for high-performance label applications.
- MTC-722..... Matte topcoat resists smudging and abrasion and offers cross-technology printability, more die revolutions and fanfoldability.
- L-344..... Aggressive, high-performance permanent pressure-sensitive acrylic adhesive.
- S50K-8..... 50 lb. bleached kraft roll form release liner.
- 91 PRT PFW..... Patented† 91 lb. layflat release liner with LAZRmatch™ technology.

Applications:

- Industrial: Materials tracking, bin markings, drum labels, asset tracking, warning labels, product identification
- Automotive/
- Electronics: Product part identification and tracking
- Appliances: Product and component identification, tracking and agency recognition
- Healthcare: Lab specimen tracking, microscope slide tracking, diagnostics
- Retail: Office products

Features & Benefits:

- 2.0 mil matte topcoated clear, white, and silver polyester film designed for cross technology printability (impact, laser*, electron beam wax, resin and wax/resin thermal transfer)
- Unique matte topcoat allows for greater than four times as many die revolutions before rtooling than comparable competitive label stocks
- Smudge, scratch and chemical and moisture resistant
- Aggressive, high-performance permanent acrylic adhesive bonds to a wide range of surfaces
- High shear, high peel adhesive resists cold flow and ooze
- Ideal for fanfoldable applications
- 50 lb. bleached kraft liner suitable for label sensing equipment through most thermal transfer printers
- Patented† 91 lb. layflat release liner with LAZRmatch technology for efficient converting, imaging and application handling
- UL-recognized for label applications under 969 standard for Marking and Labeling Systems, File No. MH16635 (N) and are listed in the recognized component directory under Section PGJ12, Component-Printing Materials
- Available in Quick-Ship for fast delivery; minimum order 125MSI

Recommendations:

Evaluate the intended ribbon and ink system for compatibility with this product under application conditions.

* For laser printing on metallized films, we recommend "fitness-for-use" testing to ensure application success.

† U.S. Patented No. 6,110,552, 6,403,190 Other patents pending.





PRODUCT DATA
Physical Properties:

PRODUCT DATA	VALUE	TEST METHOD
Thickness (mils[microns])	MTC + Film: 2.4 (61) +/- 10% Adhesive (Roll Form): 0.8-0.9 (20-23) +/- 0.1 (3) Adhesive (Sheet Form): 0.9-1.0 (23-25) +/- 0.1 (3) Liner (Roll Form): 3.1 (79) +/- 10% Liner (Sheet Form): 7.4 (188) +/- 10%	ASTMD 3652
Dimensional Stability (%)	No shrinkage observed	Applied Shrinkage: 24 hour dwell time on aluminum panel then 24 hours at 160°F (71°C)

COMPUcal EXCEL

	20440/20449	21440/21449	22440/22449	
Gloss	4.5-.0	5.0-8.0	6.0-8.0	(60° Gardner Gloss Meter)
Optical Density	.04-.06	.05-.06	3.4-4.0	Densitometer

Adhesion Properties:

Ultimate Peel from various surfaces	<u>Average Range</u> Oz/in (N/m)	ASTM D 903 (Modified for 72 hour dwell time on listed surface)
Stainless Steel	55 (605)	
Acrylic	61 (671)	
Glass	56 (616)	
Polypropylene	35 (385)	
Expected Shear (hours)	100+	ASTM D 3654 Method A a. 1 hr. dwell b. 1 sq. in. surface c. 4 lb. load
Tack (gm/sq cm)	460	ASTM D 2979





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PRODUCT DATA
Chemical Resistance

VALUE

Windex: No visual change*
Isopropyl Alcohol: No visual change*
Gasoline: Edge penetration**
Oil (SAE 10W-30): No visual change*
Acetic Acid (5%): No visual change*
Water: No visual change*
Toluene: Edge penetration, severe film deterioration*

TEST METHOD

ASTM D 896
All testing at room temperature, 5 cycles 10 min. in solvent, 30 min. recover on stainless steel panel (24 hour recovery after last cycle) vs. 72 hour on stainless steel panel at room temperature (24 hour dwell time on stainless steel panel before immersion).

Expected Exterior Life:

Film: Two years
Matte Coating: Turns yellow under sunlight

Service Temperature Range:

-40°F to 302°F (-40°C to 150°C)

Minimum Application Temperature:

50°F (10°C)

Storage Stability:

Two years when stored at 70°F (21°C) and 50% relative humidity

*Slight adhesion loss

**Moderate adhesion loss

Product Performance and Suitability

All of the descriptive information, the typical performance data, and recommendations for the use of FLEXcon products shall be used only as a guide and do not reflect the specification or specification range for any particular property of the product. Furnishing such information is merely an attempt to assist you after you have indicated your contemplated use and shall in no event constitute a warranty of any kind by FLEXcon. All purchasers of FLEXcon products shall be responsible for independently determining the suitability of the material for the purpose for which it is purchased. No distributor, salesman, or representative of FLEXcon is authorized to give any warranty, guaranty, or make any representation in addition or contrary to the above.