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PET silver matt Chemgard II

Permanent

A highly chemically resistant thermal transfer printable matt top-coated polyester film coated with a permanent pressure sensitive acrylic adhesive and backed with a glassine release liner. This material is UL-recognized (MH61146).

Typical physical Properties*

Raw material	1904004

		Typical Value		Unit	Test Method
FILM PET+TC	Thickness	55	± 10%	Micron	ASTM D 3652
ADHESIVE	Thickness	24	± 3	Micron	ASTM D 3652
	Adhesion from: Acrylic Acrylic Powder Paint Epoxy Powder Paint Glass Polyester Powder Paint Polypropylene Polyurethane Powder Paint Stainless Steel	 27 26 17 23 17 5 22 21		N/25mm	FTM 1 (72 hour dwell)
	Shear	50+		Std.	FTM 8 (1-hour dwell on stainless steel with a 2 kg weight)
	Probe Tack	720		gram/sq cm	ASTM D 2979
LINER	Thickness	56	± 10%	Micron	ASTM D 3652
COMPLETE CONSTRUCTION	Service Temperature	-40 bis 150		°C	
	Application Temperature	10		°C	
FLAMMABILITY TESTING	Self-extinguishing within 15 seconds when applied to non flammable substrate.				

Converting Recommendations	Suitable for thermal transfer printing with Valentin 1722 Special resin ribbon. High burn settings in combination with low print speed is recommended to achieve maximum chemical resistance.
Storage Recommendations	Material is stable for 12 months stored at max 21° C and 50% relative humidity. Damp conditions, excessive heat and/or freezing conditions should be avoided.
Additional Info	Expected exterior life dependant on substrate but label material is outdoor resistant for at least 12 months. Material meets REACH/SVHC and RoHS requirements, IMDS data available upon request.
Heat Age Testing	There is no degradation in barcode readability even after expose to temperatures of 150° C for 60 minutes.

***All technical data presented should be considered representative or typical only and should not be used for specification purposes.**

Topcoat

Printed with Valentin 1722 Special resin ribbon.

Mechanical Rub Test (Pressure applied 1kg weight)*

Crockmeter Test Method:

Test equipment Atlas CM-5	1. Attach 2 cotton cloths to test finger
Test finger 25mm Ø acrylic test finger	2. Soak with solvent using dropper
Cloth size 50mm x 50mm	3. Sample is rubbed back & forwards until print fades (max 100 rubs)
Printed barcodes are left for 24h	4. Solvent is continuously dripped on the image to prevent evaporation (except brake fluid)
Prior to any chemical resistance testing	

Excellent > 100 rubs	Good up to 70 rubs	Fair up to 30 rubs	Moderate up to 20 rubs

	Weiß	Silber
MEK	Excellent	Excellent
IPA	Excellent	Excellent
XYLENE	Excellent	Excellent
ACETONE	Excellent	Excellent
DIESEL	Excellent	Excellent
WHITE SPIRIT	Excellent	Excellent
TOLUENE	Excellent	Excellent
SKYDROL	Excellent	Excellent
PETROL	Excellent	Excellent
BRAKE FLUID	Excellent	Excellent

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Adhesive

Chemical Resistance*

Test Method: ASTM D896 All testing at room temperature, 24-hour dwell on stainless steel panel before immersion - 5 cycles of 10 minutes in solvent, 30 minutes recovery on stainless steel panel (24 hour recovery after last cycle) vs 72 hours on stainless steel panel at room temperature.

Glass Cleaner	No visual change or adhesion loss
Isopropyl alcohol	No visual change or adhesion loss
Gasoline	No visual change, 30% adhesion loss
Toluene	No visual change, 25% adhesion loss
Oil (SAE 10W-30)	No visual change or adhesion loss
Acetic Acid (5%)	No visual change or adhesion loss
Water	No visual change or adhesion loss

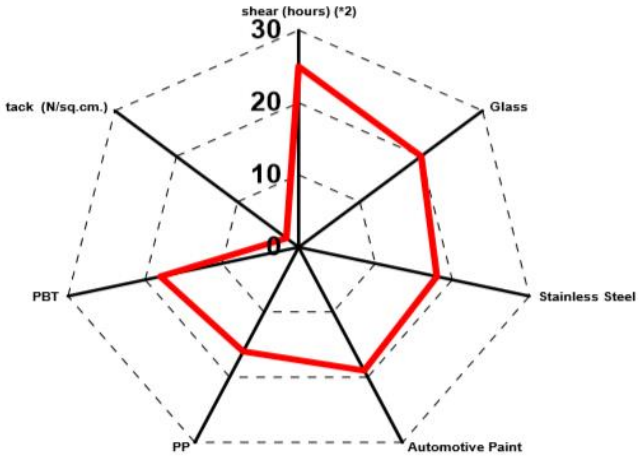
Humidity Resistance

Test method - on stainless steel panel at 38°C and 95% relative humidity vs 72 hour on stainless steel panel at room temperature.

1 day + 15 min. recovery	No visual change or adhesion loss
1 day + 24-hour recovery	No visual change or adhesion loss
7 days + 15 min recovery	No visual change or adhesion loss
7 days + 24-hour recovery	No visual change or adhesion loss
3 day water immersion + 24 hour recovery	No visual change, 30% adhesion loss

Adhesive: 72 hour Peel (N/25mm)

72 hour



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This publication replaces all previous versions. All information is subject to change without notice.

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