

SigmaKoat

About 3 Sigma

Established in 1980, 3 Sigma is a fast-growing innovator of pressure sensitive adhesive coated products. 3 Sigma uses its solvent, emulsion and hot melt technology expertise to produce specialty or complex adhesive constructions at our facility in Troy, Ohio. Our flexibility, creativity, market experience and unique product commercialization approach enables us to create higher margin, innovative products for our customers, helping them to capture market opportunities, reduce waste and production costs, and increase output.



A Proven Approach

Research and Development of custom adhesives and top coats for highly specialized pressure sensitive products is our specialty. Our solvent, emulsion and hot melt chemistry and manufacturing capabilities are utilized every day to create unique, value-added products for our customers that add directly to their bottom line. 3 Sigma's research and development personnel have worked in large multi-national corporations and follow a unique, collaborative approach when working with customers and strategic partners, ensuring alignment and a superior customer experience.

SigmaKoat™ 3 Sigma's New Product Line

At 3 Sigma we are known for providing custom adhesive and top coated constructions for the pressure sensitive industry. Since 1980 our innovative capabilities and products have helped companies create new, higher margin products for their customers while reducing waste and total applied costs. Building upon this legacy we are proud to announce our new SigmaKoat[™] family of products.

SigmaKoat HT[™] (High Temperature Thermal

Transfer) Extreme and high temperature thermal transfer label stocks designed to withstand high heat processes and applications while maintaining superior print quality compared to competitive offerings. Polyimide materials combined with specially formulated top coats and adhesives provide a world class product.

Typical Applications:

- PCB ID & tracking (lead free processes)
- Automotive under hood
- Outdoor power equipment
- Metal processing (under 300°C)
- Medical sterilization/autoclaving

Features:

- UL certified
- Cost effective and cost competitive
- Can be used for top and bottom side labeling on PCB's
- Wide range of thermal transfer ribbon capability
- Superior abrasion and harsh chemical resistance
- Ability to withstand 572°F (300°C) for brief periods

Benefits:

Superior thermal transfer print quality

 Allows printing with UV and water-based flexo, screen, or letterpress inks

Efficient converting, reduced manufacturing scrap & cost

Innovation + Thought Leadership + High Durability & High Temperature Materials =

Revenue & Profit for You



				a di se		Maximum Temp.
3 Sigma PN	Film Type	Film Thickness	Topcoat	Adhesive	Liner	(brief exp)
2 mil Gloss Wht PI SK-HT/ SP63B /	White	8	Gloss		55# White	300ºC
55# WG *	Polyimide	2 mil	PC130	SP63B	Glassine	(572ºF)
2 mil Matte Wht PI SK-HT/ SP63B /	White		Matte		55# White	300ºC
55# WG *	Polyimide	2 mil	PC120	SP63B	Glassine	(572ºF)
1 mil Gloss Wht PI SK-HT/ SP63B /	White		Gloss		55# White	300ºC
55# WG	Polyimide	1 mil	PC130	SP63B	Glassine	(572ºF)

* Denotes stocked item at 3 Sigma





Master Web Width	Roll Length	MSI/Roll	<u>Minimum Order</u>	<u>Lead Time</u>
46.5″	3,280 ft	1830	915 msi	2-3 Days

Note: If these requirements do not meet your needs, please call customer service to discuss.



"We were able to capture new business due to the unique capabilities that 3 Sigma provides"

- From 2008 ISO Customer Survey

Signakoat HTM High Temperature Thermal Transfer

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Technical Specification: SigmaKoat HT[™] - 2 mil Gloss White Polyimide /SP63B/55#WG

Description: Gloss white polyimide thermal transfer label stock. Materials have been designed for high heat applications including PCB manufacturing/tracking, automotive, outdoor power equipment, metal processing or medical sterilization up to 300°C (572°F). It is suited for variable or fixed labeling in harsh environments and will withstand wave solder, solvent cleaning and reflow processes. The gloss topcoat offers extreme resistance to chemicals, smearing and abrasion while providing for high quality thermal or press printing.

Construction

Component	Description	Thickness
Film	Polyimide	2.0 mil
Top coat	Gloss	.63 mil
Adhesive	Solvent acrylic	1.6 mil
Liner	White glassine	2.8 mil

Ribbon Compatibility

Armor	Ricoh	Sony	Zebra	Electric Imaging Co
	B110-A			
AXR8	D110-A	TR6075	5095	T96
	B110-CR			

Due to process variations, 3 Sigma recommends testing ribbon / label combination, prior to use in high temperature/PCB assembly lines

Material handling and certifications

•Label Application: Optimal results are achieved with surface temperature being close to room temperature and applied to a clean, dry surface.

•**Storage:** Labels and raw materials should be kept in plastic bags and stored at room temperature (70 - 75°F and 50% relative humidity). Shelf life under recommended conditions should yield specified performance criteria for up to 18 months.

•UL Approved: UL Test Std. UL969, Product Cat: PGJ12; Matls. File No. MH47340





Adhesive Information – SP63B

- High performance permanent acrylic
- •For use in applications up to 300°C
- •Temperature range -40 to +300 degree C
- •Typical/Average adhesion levels 3.4 to 4.5 lbs/in



Std Atm:	96 Hours at standard atmosphere
Humidity:	96 Hours at 104° F and 95% Relative Humidity
Low Temp:	96 Hours at -40° F
High Temp:	96 Hours at 167° F (PP, ABS, PVC) and 250° F (PC. AL, GS)
Water Imm:	96 Hours room temperature water immersion



Technical Specification: SigmaKoat HT[™] - 2 mil Matte White Polyimide /SP63B/55#WG

Description: Matte white polyimide thermal transfer label stock. Materials have been designed for high heat applications including PCB manufacturing/tracking, automotive, outdoor power equipment, metal processing or medical sterilization up to 300°C (572°F). It is suited for variable or fixed labeling in harsh environments and will withstand wave solder, solvent cleaning and reflow processes. The gloss topcoat offers extreme resistance to chemicals, smearing and abrasion while providing for high quality thermal or press printing.

Construction

Component	Description	Thickness
Film Polyimide		2 mil
Top coat	Matte	.63 mil
Adhesive	Solvent acrylic	1.6 mil
Liner	White glassine	2.8 mil

Ribbon Compatibility

Armor	Ricoh	Sony	Zebra	Electric Imaging Co
	B110-A			
AXR8	D110-A	TR6075	5095	T96
	B110-CR			

Due to process variations, 3 Sigma recommends testing ribbon / label combination, prior to use in high temperature/PCB assembly lines

Material handling and certifications

•Label Application: Optimal results are achieved with surface temperature being close to room temperature and applied to a clean, dry surface.

•**Storage:** Labels and raw materials should be kept in plastic bags and stored at room temperature (70 - 75°F and 50% relative humidity). Shelf life under recommended conditions should yield specified performance criteria for up to 18 months.

•UL Approved: UL Test Std. UL969, Product Cat: PGJ12; Matls. File No. MH47340





Adhesive Information – SP63B

- High performance permanent acrylic
- •For use in applications up to 300°C
- •Temperature range -40 to +300 degree C
- Typical/Average adhesion levels 3.4 to 4.5 lbs/in



Std Atm:	96 Hours at standard atmosphere
Humidity:	96 Hours at 104° F and 95% Relative Humidity
Low Temp:	96 Hours at -40° F
High Temp:	96 Hours at 167° F (PP, ABS, PVC) and 250° F (PC. AL, GS)
Water Imm:	96 Hours room temperature water immersion



Technical Specification: SigmaKoat HT - 1 mil Gloss White Polyimide /SP63B/55#WG

Description: Gloss white polyimide thermal transfer label stock. Materials have been designed for high heat applications including PCB manufacturing/tracking, automotive, outdoor power equipment, metal processing or medical sterilization up to 300°C (572°F). It is suited for variable or fixed labeling in harsh environments and will withstand wave solder, solvent cleaning and reflow processes. The gloss topcoat offers extreme resistance to chemicals, smearing and abrasion while providing for high quality thermal or press printing.

Construction

Component	Description	Thickness
Film	Polyimide	1 mil
Top coat	Gloss	.63 mil
Adhesive	Solvent acrylic	1.6 mil
Liner	White glassine	2.8 mil

Ribbon Compatibility

Armor	Ricoh	Sony	Zebra	Electric Imaging Co
AXR8	D110-A	TR6075	5095	T96
	B110-CR			

Due to process variations, 3 Sigma recommends testing ribbon / label combination, prior to use in high temperature/PCB assembly lines.

Material handling and certifications

•Label Application: Optimal results are achieved with surface temperature being close to room temperature and applied to a clean, dry surface.

•Storage: Labels and raw materials should be kept in plastic bags and stored at room temperature (70 - 75°F and 50% relative humidity). Shelf life under recommended conditions should yield specified performance criteria for up to 18 months.



•UL Approved: UL Test Std. UL969, Product Cat: PG; Matls. File No. MH47340

Adhesive Information – SP63B

- High performance permanent acrylic
- •For use in applications up to 300°C
- •Temperature range -40 to +300 degree C
- Typical/Average adhesion levels 3.4 to 4.5 lbs/in



Std Atm:	96 Hours at standard atmosphere
Humidity:	96 Hours at 104° F and 95% Relative Humidity
Low Temp:	96 Hours at -40° F
High Temp:	96 Hours at 167° F (PP, ABS, PVC) and 250° F (PC. AL, GS)
Water Imm:	96 Hours room temperature water immersion



SigmaKoat ED™ (Extreme Durability Thermal Transfer)

Polyester film stock treated with a proprietary chemistry unsurpassed in competitive offerings. The matte top coat is uniquely formulated to provide extreme image durability, outstanding abrasion and harsh chemical resistance.

Typical Applications:

- Drum labeling
- Automotive
- Electronics
- Medical & Pharmaceutical
- Warehousing

Features:

- UL & cUL Certified
 Short term exposure between 230°C and 300°C
 Long term exposure up to 120°C (248°F)
 High resistance to solvents & chemicals (wiping or immersion)
 Scratch and abrasion resistance
- Functions with a wide range of transfer ribbons

Benefits:

- Long term durability and product life
- Cost effective and cost competitive
- Ability to use in a wide range of operating environments
- Flexible printing methods: thermal transfer, flexo, offset

Sigmakoat EDTM Extreme Durability Thermal Transfer







3 Sigma PN	Film Type	Film Thickness	Topcoat	Adhesive	Liner
			Ultra-Durable		55# White
2 mil Matte Wht PET SK-ED / PE30 / 55#WG *	White Polyester	2 mil	Matte	PE30	Glassine
			Ultra-Durable		55# White
2 mil Matte Slvr PET SK-ED / PE30 / 55#WG *	Silver Polyester	2 mil	Matte	PE30	Glassine

* Denotes stocked item at 3 Sigma



Chemical Hand Rub (30seconds): Ethyl Acetate

Master Web Width	Roll Length	MSI/Roll	<u>Minimum Order</u>	<u>Lead Time</u>
46.5″	3,280 ft	1830	1830 msi	2-3 Days

Note: If these requirements do not meet your needs, please call customer service to discuss.





"3 Sigma's products are a great value. We've looked at changing, but 3 Sigma offered the best product with the best lead time."

- Jennifer Duckworth, WorkFlowOne



Technical Specification: SigmaKoat ED[™] – 2 mil Matte White Polyester /PE30/55#WG

Description: Matte white polyester thermal transfer label stock. Materials have been designed for extreme durability and abrasion resistance and provides excellent thermal print resolution using a wide variety of thermal ribbons. It is suited for variable or fixed labeling in relatively harsh environments. The high tack adhesive utilized in this construction provides good peel and shear characteristics suited for a wide range of application substrate surfaces. Materials are suitable for printing with conventional inks (Water based & UV flexo, letterpress and screen).

Construction

Component	Description	Thickness
Film	Polyester	2.0 mil
Top coat	Matte	.63 mil
Adhesive	High Perf Perm - LSE	1 mil
Liner	White glassine	2.8 mil

Ribbon Compatibility

Armor	Ricoh	Sony	Zebra	Dynic	Dia Nippon	Coding Products
AXR7+	B110-A	TR4070	3100	HL35	R510	TTR5940
AXR8	B110-C	TR4080	3200	HL45	R511-X	TTR5951
	D110-A	TR5080	4100			TTR5994
	B110-CR	TR6075	5095			TTR7993
			5100			
			5555			

Due to process variations, 3 Sigma recommends testing ribbon / label combination prior to use.

Material handling and certifications

•Label Application: Optimal results are achieved with surface temperature being close to room temperature and applied to a clean, dry surface.

•Storage: Labels and raw materials should be kept in plastic bags and stored at room temperature (70 - 75°F and 50% relative humidity). Shelf life under recommended conditions should yield specified performance criteria for up to 18 months.



•UL Approved: UL Test Std. UL969, Product Cat: PGJ12; Matls. File No. MH47340



Adhesive Information – PE30

- High performance permanent
 Works well on low surface energy substrates
 For use in applications up to 194°F (90°C)
 Temperature range -40° F/C to +194°F (90° C)
 Typical/Average adhesion levels 3.4 to 4.5 lbs/in



Std Atm:	96 Hours at standard atmosphere
Humidity:	96 Hours at 104° F and 95% Relative Humidity
Low Temp:	96 Hours at -40° F
High Temp:	96 Hours at 167° F (PP, ABS, PVC) and 250° F (PC. AL, GS)
Water Imm:	96 Hours room temperature water immersion



Technical Specification: SigmaKoat ED[™] – 2 mil Matte Silver Polyester /PE30/55#WG

Description: Matte Silver polyester thermal transfer label stock. Materials have been designed for extreme durability and abrasion resistance and provide excellent thermal print resolution using a wide variety of thermal ribbons. It is suited for variable or fixed labeling in relatively harsh environments. The high tack adhesive utilized in this construction provides good peel and shear characteristics suited for a wide range of application substrate surfaces. Materials are suitable for printing with conventional inks (Water based & UV flexo, letterpress and screen).

Construction

Component	Description	Thickness
Film	Silver Polyester	2.0 mil
Top coat	Matte	.63 mil
Adhesive	High Perf Perm - LSE	1 mil
Liner	White glassine	2.8 mil

Ribbon Compatibility

Armor	Ricoh	Sony	Zebra	Dynic	Dia Nippon	Coding Products
AXR7+	B110-A	TR4070	3100	HL35	R510	TTR5940
AXR8	B110-C	TR4080	3200	HL45	R511-X	TTR5951
	D110-A	TR5080	4100			TTR5994
	B110-CR	TR6075	5095			TTR7993
	i ii		5100			
			5555			

Due to process variations, 3 Sigma recommends testing ribbon / label combination prior to use.

Material handling and certifications

•Label Application: Optimal results are achieved with surface temperature being close to room temperature and applied to a clean, dry surface.

•**Storage:** Labels and raw materials should be kept in plastic bags and stored at room temperature (70 - 75°F and 50% relative humidity). Shelf life under recommended conditions should yield specified performance criteria for up to 18 months.

•UL Approved: UL Test Std. UL969, Product Cat: PGJ12; Matls. File No. MH47340



Adhesive Information – PE30

- High performance permanent
- Works well on low surface energy substrates
- For use in applications up to 194°F (90°C)
- •Temperature range -40° F/C to +194°F (90° C)
- •Typical/Average adhesion levels 3.4 to 4.5 lbs/in



Std Atm:	96 Hours at standard atmosphere
Humidity:	96 Hours at 104° F and 95% Relative Humidity
Low Temp:	96 Hours at -40° F
High Temp:	96 Hours at 167° F (PP, ABS, PVC) and 250° F (PC. AL, GS)
Water Imm:	96 Hours room temperature water immersion

Brand Security **Tamper** Requires....

SigmaKoat TE^m (Tamper Evident Thermal Transfer) SigmaKoat TE^m is a line of destructible films with both covert and overt features for security label applications. The custom formulated top coat improves print quality and durability. With multiple constructions available, the product provides high levels of adhesion to many surfaces, allowing the facestock to easily delaminate to show tamper evidence.



Typical Applications:

- Appliances
- Automotive
- Electronics
- Medical & Pharmaceutical
- Warehousing
- Software

Features:

- Excellent thermal receptivity with specified ribbons
- Highly versatile top coating
- Easy to die cut and matrix strip
- Hand and machine auto dispensable
- Temp range of -40 F (-40C) to 176 F (80C)

Benefits:

- Superior thermal transfer print quality
- Allows printing with UV and water-based flexo, screen, or letterpress inks
- Efficient converting, reduced mfg scrap & cost







3 Sigma PN	Film Type	Film Thickness	Topcoat	Adhesive	Liner
2.8 mil Matte White Destruct PP SK-TE / A601/55#WG *	Destruct White PP	2.8 mil	Durable Matte	A601	55# White Glassine
2.8 mil Matte White Destruct PP SK-TE / PE30/55#WG *	Destruct White PP	2.8 mil	Durable Matte	PE30	55# White Glassine
6.0 mil Matte White Destruct PP SK-TE /PE33/55#WG	Destruct White PP	6.0 mil	Durable Matte	PE33	55# White Glassine

* Denotes stock item at 3 Sigma





Master Web Width	Roll Length	MSI/Roll	Minimum Order	<u>Lead Time</u>
46.5″	3,280 ft	1830	1830 msi	2-3 Days

Note: If these requirements do not meet your needs, please call customer service to discuss.



"Six thousand containers a day are shipped to the U.S. from Hong Kong and only 2% are physically inspected."

> - U.S. Bureau of Customs and Border Protection

Sigma Koat TETM Tamper Evident Thermal Transfer

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Technical Specification: SigmaKoat TE[™] – 2.8 mil Matte White Destruct Polypropylene /A601/55#WG

Description: Matte white polypropylene thermal transfer label stock. Materials have been designed for durability and excellent thermal print resolution while providing tamper evidence features. It is suited for variable or fixed labeling in relatively harsh environments. The high tack adhesive utilized in this construction ensures that the face material will shred when the attempt is made to remove the label. This material is suited for a wide range of application substrate surfaces.

Construction

Component	Description	Thickness
Film	Polypropylene	2.8 mil
Top coat	Matte	.63 mil
Adhesive	High Tack Perm	1 mil
Liner	White glassine	2.8 mil

Ribbon Compatibility

Armor	Ricoh	Sony	Zebra	Dynic	Dia Nippon	Coding Products
AXR7+	B110-A	TR4070	3100	HL35	R510	TTR5940
AXR8	B110-C	TR4080	3200	HL45	R511-X	TTR5951
	D110-A	TR5080	4100	5		TTR5994
	B110-CR	TR6075	5095	4. 	.e	
			5100			
			5555			

Due to process variations, 3 Sigma recommends testing ribbon / label combination prior to use.

Material handling and certifications

•Label Application: Optimal results are achieved with surface temperature being close to room temperature and applied to a clean, dry surface.

•**Storage:** Labels and raw materials should be kept in plastic bags and stored at room temperature (70 - 75°F and 50% relative humidity). Shelf life under recommended conditions should yield specified performance criteria for up to 18 months.



Adhesive Information – A601

- High tack permanent
- •For use in applications up to 175°F (80°C)
- •Temperature range -40° F/C to +175°F (80° C)
- •Typical/Average adhesion levels 3.4 to 4.5 lbs/in



Std Atm:	96 Hours at standard atmosphere
Humidity:	96 Hours at 104° F and 95% Relative Humidity
Low Temp:	96 Hours at -40° F
High Temp:	96 Hours at 167° F (PP, ABS, PVC) and 250° F (PC. AL, GS)
Water Imm:	96 Hours room temperature water immersion



Technical Specification: SigmaKoat TE[™] – 2.8 mil Matte White Destruct Polypropylene /PE30/55#WG

Description: Matte white polypropylene thermal transfer label stock. Materials have been designed for durability and excellent thermal print resolution while providing tamper evidence features. It is suited for variable or fixed labeling in relatively harsh environments. The high tack adhesive utilized in this construction ensures that the face material will shred when the attempt is made to remove the label. This material is suited for a wide range of application substrate surfaces.

Construction

Component	Description	Thickness		
Film	Polypropylene	2.8 mil		
Top coat	Matte	.63 mil		
Adhesive	High Perf Perm - LSE	1 mil		
Liner	White glassine	2.8 mil		

Ribbon Compatibility

Armor	Ricoh	Sony	Zebra	Dynic	Dia Nippon	Coding Products
AXR7+	B110-A	TR4070	3100	HL35	R510	TTR5940
AXR8	B110-C	TR4080	3200	HL45	R511-X	TTR5951
	D110-A	TR5080	4100			TTR5994
	B110-CR	TR6075	5095			
			5100			
			5555		0	

Due to process variations, 3 Sigma recommends testing ribbon / label combination prior to use.

Material handling and certifications

•Label Application: Optimal results are achieved with surface temperature being close to room temperature and applied to a clean, dry surface.

•**Storage:** Labels and raw materials should be kept in plastic bags and stored at room temperature (70 - 75°F and 50% relative humidity). Shelf life under recommended conditions should yield specified performance criteria for up to 18 months.

•UL Approved: UL Test Std. UL969, Product Cat: PGGU2; Matls. File No. MH47340





Adhesive Information – PE30

- High performance permanent
- Works well on low surface energy substrates
- •For use in applications up to 194°F (90°C)
- •Temperature range -40° F/C to +194°F (90° C)
- •Typical/Average adhesion levels 3.4 to 4.5 lbs/in



Std Atm:	96 Hours at standard atmosphere
Humidity:	96 Hours at 104° F and 95% Relative Humidity
Low Temp:	96 Hours at -40° F
High Temp:	96 Hours at 167° F (PP, ABS, PVC) and 250° F (PC. AL, GS)
Water Imm:	96 Hours room temperature water immersion



Technical Specification: SigmaKoat TE[™] – 6 mil Matte White Destruct Polystyrene /PE33/55#WG

Description: Matte white polypropylene thermal transfer label stock. Materials have been designed for durability and excellent thermal print resolution while providing tamper evidence features. It is suited for variable or fixed labeling in relatively harsh environments. The high tack adhesive utilized in this construction ensures that the face material will shred when the attempt is made to remove the label. This material is suited for a wide range of application substrate surfaces.

Construction

Component	Description	Thickness		
Film	Polystyrene	6 mil		
Top coat	Matte	.63 mil		
Adhesive	High Perf Perm	1 mil		
Liner	White glassine	2.8 mil		

Ribbon Compatibility

Armor	Ricoh	Sony	Zebra	Dynic	Dia Nippon	Coding Products
AXR7+	B110-A	TR4070	3100	HL35	R510	TTR5940
AXR8	B110-C	TR4080	3200	HL45	R511-X	TTR5951
	D110-A	TR5080	4100			TTR5994
	B110-CR	TR6075	5095			
			5100			
			5555			

Due to process variations, 3 Sigma recommends testing ribbon / label combination prior to use.

Material handling and certifications

•Label Application: Optimal results are achieved with surface temperature being close to room temperature and applied to a clean, dry surface.

•**Storage:** Labels and raw materials should be kept in plastic bags and stored at room temperature (70 - 75°F and 50% relative humidity). Shelf life under recommended conditions should yield specified performance criteria for up to 18 months.



Adhesive Information – PE33

Note: Performance Specifications for PE33 utilized with Tamper Evident (destructible) facestocks have not been developed due to the nature of the product.

Should you require additional information requiring the adhesive, please contact 3 Sigma's technical department.



Additional Specialty Thermal Transfer Products Available

Film	Film				UL
Туре		Topcoat	Adhesive	Liner	Approved
-	-	e i	1	55#	P.,
		Durable		White	
White PEN	2 mil	Gloss	SP63	Glassine	No
Heat				55#	
Stabilized		Durable		White	
Film (PET)	2 mil	Matte	SP63	Glassine	No
Heat				55#	
Stabilized		Durable		White	
Film (PET)	2 mil	Gloss	SP63	Glassine	No
		Ultra-		55#	
		Durable		White	
White PET	2 mil	Matte	SP61	Glassine	No
		Ultra-		55#	
		Durable		White	
White PET	2 mil	Matte	SP61B		No
		_			
	0		0.004		N-
	2 mii	GIOSS	5761	1)	No
		Durabla			
White PFT	2 mil		SP61B		No
		01033			
		Semi-			c N us
White PET	2 mil	Matte	PE30	Glassine	C THE US
				55#	
		Semi-		White	c RS us
Silver PET	2 mil	Matte	PE30	Glassine	0 2 - 03
				55#	
				White	c Rus
White PET	2 mil	Gloss	PE30	Glassine	
		_			
white PET	2 mil	Matte	PE30		
		Durchic			
Silver DET	2 mil		PE30		
	<u> </u>	malle			
		Durable			7
White PET	2 mil		A601		
				40#	
		Durable		White	
Silver PET	2 mil	Matte	A601	Glassine	
(
				55#	
Destruct		Durable	White	55# White	
	Type White PEN Heat Stabilized Film (PET) Heat Stabilized Film (PET) White PET White PET White PET White PET Silver PET White PET Silver PET White PET White PET	TypeThicknessWhite PEN2 milHeat2 milStabilized2 milFilm (PET)2 milHeat2 milStabilized2 milWhite PET2 milSilver PET2 milWhite PET2 milWhite PET2 milSilver PET2 milWhite PET2 milWhite PET2 mil	TypeThicknessTopcoatImage: Stabilized Film (PET)2 milDurable GlossHeat2 milDurable film (PET)Stabilized Film (PET)2 milMatteHeat2 milGlossStabilized Film (PET)2 milMatteWhite PET2 milUltra- DurableWhite PET2 milMatteWhite PET2 milMatteWhite PET2 milMatteWhite PET2 milMatteWhite PET2 milMatteWhite PET2 milSemi- GlossWhite PET2 milSemi- MatteWhite PET2 milSemi- 	TypeThicknessTopcoatAdhesiveImage: Constraint of the sector of the	TypeThicknessTopcoatAdhesiveLinerImage: Second Seco



About 3 Sigma

Established in 1980, 3 Sigma is a fast-growing innovator of pressure sensitive adhesive coated products. Our solvent, emulsion, and hot melt technology expertise inside our 85,000 sq ft plant in Ohio produces specialty or complex coating and adhesive constructions.

Our flexibility, creativity, market experience and unique product commercialization approach enables us to create higher margin, innovative products for our customers, helping them to capture market opportunities, reduce waste and production costs, and increase output.

A New Focus: Value Added Toll Coating At 3 Sigma, we work with market leaders who are seeking partners to co-develop and validate new, innovative products.

Because of our vast industry knowledge, chemistry, and unique capabilities, 3 Sigma is a perfect fit for companies looking for ways to reduce scale up and product commercialization time and cost, accelerate the capture of market opportunities and overcome internal human capital or financial constraints.

Contact us for more information on our SigmaKoat[™] product line or our Value Added Toll Coating capabilities.



Sigma Corporation 1985 West Stanfield Road. Troy, Ohio 45373 PH: 1.800.347.3091 FX: 1.800.291.0895 www.3Sigma.cc

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