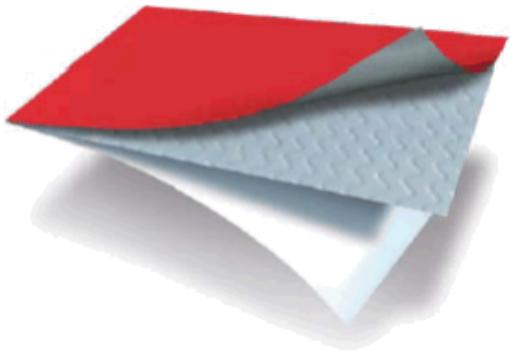
AI300

Fasson ®

POLYIMIDE I MATT WHITE S8088-50#SCK



POLYIMIDE I MATT WH	
S8088	
#50SCK	

Facestock

A matt white topcoated polyimide film with very high dimensional stability, heat and chemical resistance. The high opacity white topcoat is specifically designed for thermal transfer printing and offers excellent scratch, scuff, UV, high temperature and solvent resistance.

Basis Weight	72 g/m²	ISO 536
Caliper	45 µm	ISO 534
Maximum Service Temperature	180 °C	
Maximum Peak Temperature	280 °C	

Adhesive

S8088 is a high temperature acrylic adhesive with excellent heat and chemical resistance.

Liner

50# SCK is a bleached, super calendered paper stock with very good diecutting and matrix stripping properties. Used for standard roll-to-roll applications.

Basis Weight	87 g/m²	ISO 536
Caliper	81 µm	ISO 534

Laminate

Total Caliper	150 µm±10%	ISO 534

Performance Data

Initial Tack	5 N/25mm	FTM 9 glass
Peel Adhesion 90°	5 N/25mm	FTM 2 st.st.; 24 hrs.
Min. Application Temp.	10 °C	
Service Temperature	-40 °C to 180 °C	
Adhesive Coat Weight	25 g/m²	FTM12
Adhesive Type	Solvent Acrylic	

Adhesive Performance

S8088 was specially developed for labeling printed circuit boards prior to soldering.

Applications and Use

This product was specially developed for labeling printed circuit boards prior to soldering. The construction is designed to withstand reflow processes regardless if the label is on top or bottom of the board. It can also withstand two cycles of reflow processes when surface mounting elements to both sides of the board. The product is also designed to be used in the wave solder process even when directly exposed to the solder bath. The matt topcoat had been formulated to prevent solder balls forming on top of the label. Application tests are highly recommended.

Conversion and Printing

The topcoat is designed for thermal transfer and flexo printing. When used with an appropriate ribbon it will withstand temperature spikes up to 280ºC. Due to the thinness of the facestock, automatic dispensing and application should be thoroughly tested prior to committing to production.

Compliance and Approvals

This product is UL recognized (UL 969). The UL file number is MH27538.

Shelf Life

To obtain optimal performance, use this product within two years of the date of manufacture, under storage conditions as defined by FINAT (20-25°C; 40-50%RH). Prolonged storage outside these conditions might reduce the shelf life.

Appendix

UL and CSA recognition

This product meets the requirements as stated in UL 969 and CSA C22.2 No. 0.15 for indoor use.
The UL file number is MH27538. For specific information on approved conditions, see appendix.

Performance Data

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

Peel Adhesion:

FTM1: 180°, 300 mm/min, dwell time: 48 hours

Surface	dwell time 20 min (N/25mm)	dwell time 24 hrs (N/25mm)
Epoxy Printed Circuit Board	4,5	7,0
Stainless Steel	4,5	6,5

Short term high temperature resistance:

The label material has been tested on Epoxy Printed Circuit Board. A typical reflow solder profile with a maximum temperature of 240°C has been processed.
No visible changes could be noticed. Print is still legible.

Chemical Resistance:

The performance results are based on simulation of a typical PCB cleaning process including a simulation of a solder process.

Cleaning agent	Cleaner agent base	Process	Wash time	Temp. (°C)	Rinse time	Rinse temp. (°C)	Visual appearance
Vigon US[1]	Water based	Ultrasonic	10 min	50	10 min	80	No change
Vigon A200[1]	Water based	Spray-in-air	10 min	50	10 min	80	No change
Vigon A250[1]	Water based	Spray-in-air	10 min	50	10 min	80	No change
Vigon A300[1]	Water based	Spray-in-air	10 min	50	10 min	80	No change
Zestron FA+[1]	Semi-aqueous	Dip tank	10 min	50	10 min	80	No change
Zestron VD[1]	Solvent based	closed-loop processes with steam rinsing	10 min	50	10 min	80	No change
Zestron CE[1]	Solvent based	closed-loop processes with steam rinsing	10 min	50	10 min	80	No change
Atron AC205[1]	Water based	Spray-in-air	10 min	50	10 min	80	No change
Aquanox® A4625B[2]	Water based	Spray-in-air	15 min	65	5 min	51	No change
Aquanox® A4625[2]	Water based	Spray-in-air	15 min	65	4 min	51	No change

Chemicals [1] Dr. O.K. Wack-Chemie GmbH, [2] Kyzen Corporation

Appendix

Thermal Transfer Printing:

Printability – Physical Resistance

Flat head printers (tests were performed with the printer Zebra XII 140):

Ribbon	Settings speed	Settings energy	Print Quality	ANSI Grade	Scratch resistance	Tape resistance
Armor AXR7+	3	15	++	A	++	++
Dai Nippon R300	3	15	++	A	++	++
Dai Nippon R510	3	15	++	A	++	++
Dai Nippon TR6075	3	15	++	A	++	++
Iimak SP 330	3	15	++	A	++	++
ITW B324	3	15	++	A	++	++
Ricoh B110A	4	15	++	A	++	++
Ricoh B110CR	3	15	++	A	++	++

Near edge printers (tests were performed with the printer Avery TTX 450 – Near Edge):

Ribbon	Settings	Print Quality	ANSI Grade	Scratch resistance	Tape resistance
Dai Nippon TR4500	4 ”/s	++	A	++	o
Ricoh B120Ec	4 ”/s	++	A	++	-

ANSI (American National Standards Institute) Grade: information about barcode quality
A: excellent B: good C: acceptable D: readable with difficulty
++: excellent +: good o: acceptable -: poor

Chemical Resistance

The printed samples passed a simulation of a solder process, followed by typical PCB cleaning processes (3 cycles), as described on the previous page. Afterwards the evaluation took place.

	AXR7+	R300	R510	SP330	B324	B110 CR	B110A	TR6075
Vigon US[1]	+	NT	+	+	+	o	o	+
Vigon A200[1]	+	NT	+	+	+	+	-	+
Vigon A250[1]	+	NT	+	+	o	-	-	+
Vigon A300[1]	+	NT	+	+	+	o	+	+
Zestron FA+[1]	o	NT	o	+	o	o	-	o
Zestron VD[1]	+	NT	+	NT	+	+	o	NT
Zestron CE[1]	-	NT	+	NT	-	-	-	-
Atron AC205[1]	+	+	+	NT	NT	+	o	NT
Aquanox® A4625B[2]	+	NT	+	NT	NT	+	+	NT
Aquanox® A4625[2]	+	NT	+	NT	NT	+		NT

+: good (no change) o: acceptable (minor change, still readable) -: poor NT: not tested

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Chemicals:
[1] Zestron Europe, a Business Division of Dr. O.K. Wack Chemie GmbH
[2] Kyzen Corporation

Appendix

Compliance Data

UL – Underwriters Laboratories (UL 969, Category PGJI2)

File Number: MH27538, Category PGJI2

This material is UL recognized for indoor use where exposed to high humidity or occasional exposure to water.

Application Surface	Max Temp (°C)	Min Temp (°C)
Aluminum	+150	-40
Galvanized steel	+150	-40
Stainless steel	+100	-40
Epoxy printed wiring boards	+100	-40

The UL recognition includes wave solder applications at 300°C for 5 seconds on Epoxy Resin PWB.

The UL certification includes the printing with the following thermal transfer ribbons:
Armor “AXR7+”, “AXR EL”, DNP "R-510" and "R-300", Iimak “SP330” and ITW "B324".

CSA – Canadian Standards Association

UL has tested this product according to the requirements described in CSA C22.2 No. 0.15.
This product is C-UL recognized for indoor use.
The details are listed in the UL file number MH27538, Category PGJI8.

Group	Application Surface	Max. Temperature (°C)
Metals	Bare, plated or enamelled steel; bare, anodized or enamelled aluminium	+100
Epoxy printed wiring boards		+100

The C-UL certification includes the printing with the following thermal transfer ribbons:
Armor “AXR7+”, “AXR EL”, DNP "R-510" and "R-300", Iimak “SP330” and ITW "B324".

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Warranty
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