Quick-Laser – Type 2 White (Die cut only)
Type 3: Yellow (plain A4 & Die cut)
Laser Imprintable Marking Systems

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Physical Properties
Not for specification purposes
(Calipers are nominal values)

Facestock	2.3 mil (58 Micron) Matte Radiant White polyester
Adhesive	1.1 mil (28 micron) HP-395 emulsion acrylic
Liner	4.6 mil (117 micron) 78# Clay coated Kraft
Shelf Life	12 months from date of manufacture of product when properly stored between 72°F (22°C) and 50% relative humidity.

Features:

- Top-coated polyester provides excellent toner anchorage. It is also receptive to dot matrix printing and is hand writeable. The matte coating resists degradation from scuffing, chemicals, moisture, and wide temperature fluctuations. The topcoat also provides improved ink anchorage for traditional forms of press printing.
- HP-395 adhesive is a firm emulsion acrylic that offers good adhesion and provides a degree of repositionability on some surfaces.
- 78# kraft liner die-cuts, perforates, and fanfolds easily.
- 3M™ Label material 7842 is UL recognised (File MH16411) and CSA accepted (File 99316). See the UL and CSA listings for further details.

Application Ideas:

- Barcode labels and rating plates.
- Die cut labels on A4 sheet.
- Warning, instruction, and service labels for durable goods.
- Nameplates for durable goods.

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

ADHESION: 180° PEEL TEST PROCEDURE IS ASTM D 3330
90° PEEL TEST PROCEDURE IS ASTM D 3330 MODIFIED FOR THE ANGLE CHANGE

Typical Physical Properties Not for specification purposes	Initial (10 Minute Dwell / RT				Conditioned for 3 days at Room Temperature 72°F (22°C)			
	180° Peel		90° Peel		180° Peel		90° Peel	
Surface	Oz / In	N/100 mm	Oz / In	N/ 100 mm	Oz / In	N/100 mm	Oz / In	N/ 100 mm
Stainless Steel	39	43	33	36	41	45	33	36
Polycarbonate	47	51	39	43	52	57	42	46
Polypropylene	41	45	30	33	46	50	29	32
Glass	37	40	33	36	46	50	31	34
HD Polyethylene	22	24	21	23	26	28	26	28
LD Polyethylene	18	20	16	18	31	34	26	28

Quick-Laser – Type 2 White (Die cut) and Type 3 Yellow

Typical Physical Properties Not for specification purposes	Conditioned for 3 days at 120°F (49°C)				Conditioned for 24 hours at 90°F (32°C) At 90% Relative Humidity			
	180° Peel		90° Peel		180° Peel		90° Peel	
Surface	Oz / In	N/100 mm	Oz / In	N/ 100 mm	Oz / In	N/100 mm	Oz / In	N/ 100 mm
Stainless Steel	46	50	37	40	12	13	20	22
Polycarbonate	30	33	23	25	58	63	24	26
Polypropylene	42	46	34	37	47	51	20	22
Glass	45	49	37	40	13	14	9	10
HD Polyethylene	29	32	25	27	30	33	19	21
LD Polyethylene	9	10	13	14	21	23	19	21

Liner Release 180° Removal of Liner from Facestock

Rate of Removal	Grams / Inch Width	N / 100 mm
90 inches / minute	20	0.77
300 inches / minute	29	1.12

Environmental Performance	The properties defined are based on four hour immersions at room temperature (72°F/22ºC) unless otherwise noted. Samples were applied to stainless steel panels 24 hours prior to immersion and were evaluated one hour after removal from the solution for peel adhesion. Adhesion measured at 180º peel angle (ASTM D3330) at 12 inches / minute.			
Chemical Resistance	Adhesion to Stainless Steel		Appearance	Edge Penetration
Chemical	Oz/In	N/10mm	Visual	Millimetres
Isopropyl Alcohol	42	46	No change	1
Detergent (1% Alconox®*)	44	48	No change	0
Engine Oil (10W30) @ 250ºF (121ºC)	19	21	No change	0
Water for 48 hours	3	3	No change	0
pH 4	44	48	No change	0
pH10	46	50	No change	0
409®* Cleaning Solution	42	46	No change	0
Toluene	22	24	Top Coat damaged	7
Acetone	32	35	Top Coat damaged or gone	4
Brake Fluid	53	58	No change	0
Gasoline	26	28	No change	6
Diesel Fuel	41	45	No change	1.5
Mineral Spirits	35	38	No change	3
Hydraulic Fluid	44	48	No change	0

Temperature Resistance	300°F (149°C) for 24 hours:	no significant visual change 0.6 % MD shrinkage 0.6 % CD shrinkage
	-40°F (-40°C) for 10 days:	no significant visual change
Humidity Resistance	24 hours at 100°F (38°C) and 100% relative humidity	no significant changes in appearance or adhesion
Accelerated Aging		
ASTM D3611	96 hours at 150°F (65°C) & 80% relative humidity	

	Rate of Removal	Grams / Inch Width	N / 100 mm
180° Removal of Liner from Facestock	90 inches / minute	37	1.43
180° Removal of Liner from Stainless Steel	12 inches / minute	42	1.62

Quick-Laser – Type 2 White (Die cut) and Type 3 Yellow

Agency Listing Information	Laser Toning Printing: * Laser Toner / UL recognised Hewlett Packard ™ 92274A, 92275A, 92291A, 92295A, 92298A, C3900A, C3903A, and C3909A toner cartridges for producing finished printed labels with compatible UL listed Hewlett Packard HP Laserjet printer.

Processing

General:
Use label material in environment of 70°F (21°C) and 50% relative humidity. 1/16" periphery removal of the label matrix is recommended to minimise adhesive ooze. If foam is used to pack the die when rotary sheeting, the foam should be kept at least ¾" away from knife edges. Poly-bag sheets after converting the label material. Keep the laser label material in polyethylene (LDPE) bags until printing. No more than 250 sheets per box.
Fan all edges of sheets prior to laser printing. Use the straightest printing path when printing laser label materials. The extreme heat and pressure used in the toner fusing section of some laser printers may cause curl in the printed label material. When converting to A4 sheets it is recommended that the longest edge of the sheet is parallel to the machine direction.

Printing:
Facestock is top-coated for improved ink receptivity and is designed for laser toner and dot matrix printing. It is printable by all standard roll processing methods including flexography, hot stamp, letterpress, and screen printing. Refer to the Graphic Ink Selection Guide or call 3M Customer Service at 001 800 223 7427 for additional information.

Die Cutting:
Rotary or flat bed may be used. 78# liner is recommended for jobs over eight inches in width or when liner dimensional stability is of concern. Winding tensions should be kept at a minimum to help prevent the adhesive from oozing.

Packaging:
Finished labels should be stored in plastic bags.

Values presented have been determined by standard test methods and are average values not to be used for specification purposes.
Our recommendations on the use of our products are based on tests believed to be reliable but we would ask that you conduct your own tests to determine their suitability for your applications.
This is because 3M cannot accept any responsibility or liability direct or consequential for loss or damage caused as a result of our

Special Considerations

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

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

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.

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