



Durable Print Solutions

Durable Resin Ribbon 92904

Technical Data

January, 2012

Product Description

3M™ Durable Resin Ribbon 92904 is a black thermal transfer resin ribbon designed to work with most flat head technology thermal transfer printers.

Typical Physical Properties

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

Total ribbon thickness (black)	< 9 micron
Polyester carrier thickness	4.5 micron

(Calipers are nominal values)

Key Features

- Offers excellent smudge and abrasion resistance when printed on 3M recommended media.
- Enables sequential labeling of parts at the point of application without the need for over-lamination.
- Offers high solvent and chemical resistance when printed on a range of 3M recommended receiving media.

Application Ideas

- Recommended for on-demand variable printing applications in Automotive, Electronics (e.g. chemical cleaning, degreasing), Laboratory, Chemical Drum and IBC labeling.

Recommended Receiving Media

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

To achieve maximum resistance properties 3M™ Durable Resin Ribbon 92904 is recommended for use with the following label materials:

Durability	3M™ Label Material	Facestock	Adhesive	Liner
ULTRA	76717NA	White Polypropylene	350	55# DK
HIGH	7246	White Polyester	350	40# DK
	7247	Silver Polyester	350	40# DK
STANDARD	7815	Matte White Polyester	310	55# DK
	7868	White Polyester	350	55# DK
	7871	White Polyester	350 1.8	55# DK

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Solvent and Chemical Resistance Properties

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

Solvent and Chemical Resistance Test Method:

3M™ Polypropylene Label Material 76717NA was printed with 3M™ Durable Resin Ribbon 92904 on a Zebra 140XIII thermal transfer printer at a burn setting of 25 and print speed of 4 inches / second. Test fluids were applied to a dry cotton cloth and wiped over the print area. The number of double rubs (300g pressure) was recorded at the point when the print was damaged / removed or changed visually.

Grading: Solvent & Chemical resistance

4 - EXCELLENT (minimal or no print damage. 80-100 rubs)

3 - GOOD (minor print damage. 50-80 rubs)

2 - SOME (ribbon partially removed. 20-50 rubs)

1 - POOR (ribbon removed. 0-20 rubs)

Abrasion resistance cUL - 3M Durable Resin Ribbon 92904 3M Label Material 76717NA

Minimal or no damage observed after 100 cycles.

Conditions: CS-10 Calibrase wheels, 250g load.

Test Chemical	3M™ Durable Resin Ribbon 92904 3M™ Polypropylene Label Material 76167NA
Acetone	4
Methyl ethyl ketone (MEK)	4
Isopropyl Alcohol (IPA)	4
Brake Fluid (Dot)	4
Diesel	4
Petrol	4
Motor Oil	4
Skydrol (LD4)	4
Heptane	3
Formula 409	4
3M Citrus Cleaner	2
Lemon Grass Oil	4

Storage

Store at standard room temperature 70°F (21°C) and 50% relative humidity.

Shelf Life

24 months from date of manufacture by 3M when stored in the original packaging at 70°F (21°C) and 50% relative humidity.

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Technical Information

The technical information, recommendations and other statements contained in this document are based upon tests or experience that 3M believes are reliable, but the accuracy or completeness of such information is not guaranteed.

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ISO 9001:2008

This Industrial Adhesives and Tapes Division product was manufactured under a 3M quality system registered to ISO 9001:2008 standards.



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10% post-consumer

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