

Product identification labels that need to withstand harsh environments and resistance to aggressive solvents / chemicals are often pre-printed and then over-laminated by the converter.

3M durable resin ribbon 92904 offers high solvent & chemical resistance when printed on a range of 3M PP and PET label materials allowing sequential labelling of parts at the point of application without the need for over-lamination.

The combination of 3M 92904 ribbon with 3M recommended label stocks offers superior chemical resistance to very harsh organic solvents (e.g. Acetone, Methyl ethyl ketone (MEK), Toluene) for ondemand variable printing applications in Automotive, Electronics (e.g. chemical cleaning, degreasing) and Chemical Drum and IBC labelling.

3M 92904 is designed to work with most flat head technology thermal transfer printers and offers excellent smudge and abrasion resistance when printed on 3M recommended media.



Providing high performance ...

- Through superior chemical resistance
- When printed on 3M label stocks





Total ribbon thickness (black): < 9 microns</li>
Polyester carrier thickness: 4.5 microns

## Recommended Receiving Media

To achieve maximum resistance properties 3M 92904 resin ribbon is recommended for use with the following label materials: **3M 76717** TTO GW PP60-350E/40-65DWG, **3M 76955** AR MW PP60-350E/40-65DWG, **3M 76962** AR MW PET50-350E/46-65DWG, **3M 76964** AR MS PET50-350E/46-65DWG

## Solvent & Chemical Resistance Properties

3M Polypropylene label material 76717 was printed with 3M durable resin ribbon 92904 on a Zebra 140XiIII 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.

Test Chemical	3M 92904 ribbon printed on 3M 76717 Polypropylene
Acetone	
Methyl ethyl ketone (MEK)	
Isopropyl alcohol (IPA)	
Brake fluid (Dot 4)	
Diesel	
Petrol	
Motor Oil	
Skydrol (LD4)	
Heptane	
Formula 409	
3M Citrus Cleaner	
Lemon Grass Oil	

## Grading: Solvent & chemical resistance



- EXCELLENT (minimal or no print damage, 80-100 double rubs)



GOOD (minor print damage, 50-80 double rubs)



SOME (ribbon partially removed, 20-50 double rubs)



POOR (ribbon removed, 0-20 double rubs)

Abrasion resistance (CSA) - 3M 92904 printed on 3M Polypropylene 76717

Minimal or no damage observed after 100 cycles. Conditions: CS-10 Calibrase wheels, 250g load.



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## Important Note:

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