



# RFID Label Solutions



*Labels that broadcast identity, activity, location, history, and more*



# Technology and service to help you readily compete for growing

## RFID – now a necessity for many manufacturers and supply chains –

RFID labels are no longer a “wait and see” technology with the promise of improving manufacturing operations, supply chain management, and inventory control. Increasingly, Radio Frequency Identification (RFID) labels are necessary for doing business. Companies worldwide now recognize the benefits of this innovative technology and have established compliance standards for themselves and their suppliers.

Bar codes opened the way for the concept of scanning-based asset management, so the acceptance rate for RFID is expected to be faster than the time it took bar codes to populate the retail world. While not a replacement for bar codes in many applications, RFID labels are increasingly at work in manufacturing, warehouses, shipping departments, and through distribution.



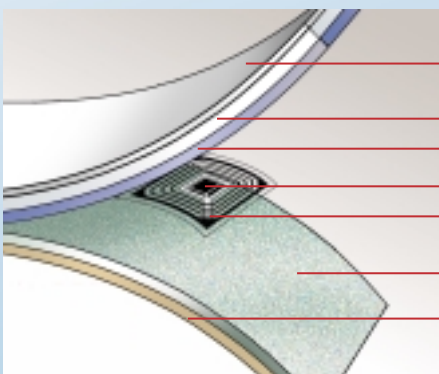
As RFID acceptance continues to increase, managers in many businesses will need to rely on label suppliers with RFID solutions

and experience. When you get into the business, 3M technology and service can help you compete comfortably.

## 3M technology for top to bottom reliability –

Passive Radio Frequency Identification (RFID) labels digitally store information such as identity, activity, location, and history. When activated by a reader, the label “broadcasts” to the reader for downloading into a computer for

processing, analysis, and storage. Technically, this is not scanning since the reader does not require a line of sight. An RFID label on the inside or opposite side of a carton still transmits to the reader.



## Full “protective package” with 3M™ Performance Label Materials

To help you respond quickly to customer demand, 3M delivers what you need for mix and match solutions for even the highest volume production:

- Wide variety of 3M adhesives with job-matched characteristics such as high temperature resistance and adherence to low surface energy materials (see selection chart on back)
- Choice of durable PET, PP, and vinyl facestocks to help assure reliable data transmission even when the label is exposed to dirt, abrasion, and moisture
- Top coats and overlaminates for protection and quality printing
- 3M™ EMI Absorber Sheets to improve read performance of high frequency RFID tags on metal

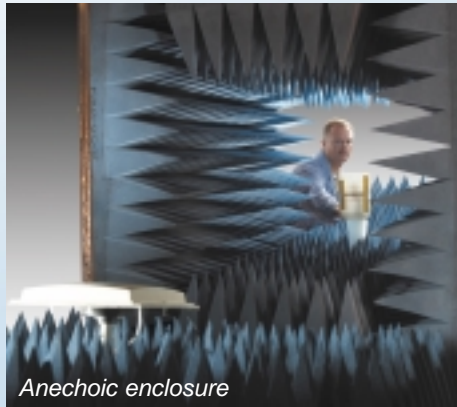
# RFID label business

## 3M service and experience to help you compete –

3M technical and market knowledge is your resource for making entry into the RFID label business or expanding business that you have already.

- 30 years of labels experience
- 50 years experience in industrial adhesives
- Application Development Specialist team for label customization

- Developer and manufacturer of RFID asset tracking systems for libraries, legal firms, courts, government agencies, and insurance companies.



Advanced test facilities –  
A combination of equipment and trained personnel for product design and development.

## Application Areas

- Retail supply chain
- Logistics automation in manufacturing
- Asset management and tracking
- Department of Defense and other government agencies
- Pharmaceuticals
- Automotive
- Consumer electronics
- Medical equipment and devices
- Food and beverage industry
- Aerospace
- Healthcare
- Returnable plastic containers or totes
- And more



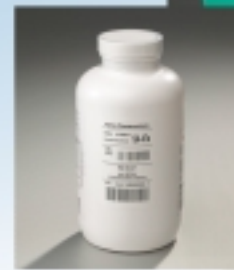
Asset management



Returnable plastic containers



Consumer electronics



Pharmaceuticals



Medical equipment and devices



Contact your 3M Converter Markets representative for label stock samples and to discuss a collaborative effort at building your RFID Label business.

# RFID Label Solutions Selection Guide

Table presents products known for RFID applications in specific industries.

If you don't see the construction you need, contact your 3M sales representative or customer service.

Application	Product Number	Adhesive	Facestock	Liner	Description
DoD - Military	7860	300	2 mil White Polyester Gloss TC	55# DK	Durable, long lasting; high tack adhesive. Thermal transfer printable.
	7868	350	2 mil White Polyester Gloss TC	55# DK	Durable, long lasting. Excellent temperature and solvent resistance. 1.1 mil thick adhesive is good for layering with transfer tape for RFID label construction.
	9458	300	N/A	55# DK	Transfer adhesive; same adhesive as label stock 7860 for compatibility.
Pharmaceuticals	7000	320	60# White High-Gloss Paper	40# DK	Flag resistance on small diameter vials.
	7011	320	32# White Coated Paper	40# DK	Tamper indicating – destructible.
	7866	300	2 mil White Polyester Gloss – Void	50# DK	Tamper indicating – VOID.
	9447	320	N/A	55# DK	Transfer adhesive; same adhesive as label stocks 7000/7011 for compatibility.
Retail Supply Chain	FP018802	P1212	2.6 mil White Polypropylene T2S	50# SC	General purpose adhesive with PP film for shipper labels. Thermal transfer printable.
	FP027202	P1400	2.3 mil White Polypropylene TC2S	50# SC	High performance adhesive formulated for demanding applications. FDA <sup>1</sup> . Thermal transfer printable.
	OFM03502	P1400	2 mil White Polyester Matte MC	50# SC	High performance adhesive formulated for demanding applications. FDA <sup>1</sup> . Abrasion resistant facestock. Thermal transfer printable.
	OFM03402	P1400	2 mil White Polyester Gloss TC	50# SC	High performance adhesive formulated for demanding applications. FDA <sup>1</sup> . Thermal transfer printable.
	9457	400	N/A	55# DK	Transfer adhesive, high strength, but temporarily removable on corrugated for quality assurance purposes.
Food Packaging	FP016102	F2201	2.3 mil White Polypropylene TC2S	50# SC	Freezer grade adhesive with excellent adhesion to a wide variety of substrates. Service temps down to -60°F (-51°C) for flash freeze process. Thermal transfer printable.
	Transfer Adhesive	P1110	N/A	Double Lined	Transfer adhesive. Also available with label stock. Adhesion to waxed corrugated substrates; FDA <sup>1</sup> .
Automotive	7871	350	2 mil White Polyester Gloss TC	50# DK	High temperature performance on difficult substrates including low surface energy plastics. Durable applications. Designed to pass most stringent underhood automotive specs. Thermal transfer printable.
	FP022102	P1480	3 mil White Polypropylene Matte EDP C1S	50# SC	Lower temp. requirements, non-durable applications, extremely aggressive adhesive for difficult substrates.
General Industrial	7816	310	2 mil White Polyester Gloss TC	55# DK	Firm adhesive designed for high volume thermal transfer printing.
	7871	350	2 mil White Polyester Gloss TC	50# DK	Thick, 1.8 mil adhesive ideal for textured powder painted substrates and low surface energy plastics.
	9442	350	N/A	55# DK	Excellent temperature and solvent resistance; high bond to low surface energy substrates.
Metal Substrates 13.56 MHz labels	AB-2000 Series	N/A	EMI absorbers	N/A	Improved read performance of High-Frequency RFID tags on metal substrates.
Transponder Assembly	8794	N/A	Anisotropically Conductive Adhesive Film (ACF)	N/A	Hot melt film adhesive for chip or strap attachment to antenna.

<sup>1</sup> Dry ingredients are listed as indirect food contact additives when used in food packaging with minimal opportunity for exposure. See 21 CFR 175.105.

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