



# Durable Goods Labelling Compliance

*“Durable goods require labels that give crucial instructions, product details and safety information. The labels have to stay in place and remain legible for the entire lifespan of an item - which can be a demanding labelling challenge.”*

Choosing a pre-tested and compliant labelling material means added reassurance for converters and a simpler and faster route to adoption for end users. This document summarises the commonly used standards and specifications for durable goods labelling, and shows a wide range of compliance-tested Avery Dennison materials. Please contact your sales representative if you need any additional information or further testing support.

The biggest subsegments in which common regulations and specifications apply are electronics & appliances and automotive.





# Electronics & Appliances

## UL AND C-UL

UL (formerly Underwriters Laboratories Inc.) is a US-based safety consulting company established in 1894. Goods and components to be sold in the US must be UL-recognised for safety. The company not only tests and certifies products in its laboratories, but also defines standards and writes specifications.



UL understands that safety-related labels are critical to the overall product safety. It sets out relevant requirements in the standard UL 969 ("Standard for Marking and Labeling Systems"). This focuses especially on the permanence of adhesion and legibility after different exposure conditions. Converters supplying labels for use with a UL-recognised product in the US must meet all relevant UL requirements.

In Canada, labels must comply with CSA standard 22.2 no. 0.15 ("Adhesive Labels"). UL also tests and recognises labels according to this standard, which are then C-UL recognised.

## UL FOR CABLE LABELS

Whereas UL 969 is applicable only to labels on smooth and flat surfaces cables and wire labelling is evaluated against different UL standards, and Avery Dennison offers materials that comply with the following standards:

- > UL 817 – cord sets and power supply cords
- > UL 2238 – cable assemblies and fittings for industrial control and signal distribution



## CHEMICAL RUB TEST OF PRINTED LABELS

A marking durability rub test is often needed for labels on electronic and electrical goods. A visual examination assesses the label's legibility and adhesion after rubbing the labels with a cloth that has been soaked in any of a variety of liquid(s) including petroleum spirit (hexane), water, methylated spirit (ethyl alcohol denatured with methanol) and isopropyl alcohol. The liquid and rubbing duration will vary by standard (for example VDE 0711, ICE 60335-1, IEC 60950-1 and DIN 75302).

Avery Dennison has tested printed samples according to the widely used specification ICE 60335-1 (7.14). This involves rubbing a label for 15 seconds with a cloth soaked in water, drying, and then rubbing for 15 seconds with a cloth soaked in n-hexane.

Electrical medical equipment labels are tested for chemical resistance according to IEC 60601-1. This involves rubbing printed samples for 15 seconds with a cloth soaked with water, followed by 15 seconds with methylated spirit and finally 15 seconds with IPA.

# OVERVIEW OF COMPLIANT DURABLE LABEL MATERIALS



The table below shows only positive test results. An empty cell does not always imply that a material is not compliant, but may simply mean that it has not been tested. Further information is available on request.

		Ribbons included in UL/ c-UL Recognition																		Surfaces included in UL Recognition										Surfaces included in c-UL Recognition			
		UL indoor	UL outdoor	c-UL indoor	c-UL outdoor	Armor AXR600	Armor AXR7 +	Armor AXR 8	DNP R300	DNP R510	DNP TR4070	DNP TR6070	DNP TR6075	Limak SP-330	Limak SP-410	ITW B324	Ricoh B110C	Ricoh B110CR	Ricoh B110CX	Others'	Aluminium	Stainless Steel	Acrylic paint	Alkyd paint	Polyester paint	ABS	Polycarbonate (PC)	Polypropylene (PP)	Polystyrene (PS)		Others'		
Overlamination Films	Code	✓	✓			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Fasson® 1M CL PET TC/S8020/PET30	MZ0111	✓	✓			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Fasson® 1M CL PET TC/S8020/BG40Wh Imp	MZ0111N	✓	✓			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Fasson® 1 Mil Clear UV PET/S3000/1M PET	#79325	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓	✓	✓	✓	✓	✓	for use on polyester, polypropylene and vinyl base materials										polyester, polypropylene and vinyl base materials	
Fasson® 1 Mil Clear Print-Treated Polyester/S8020/1M PET	#77955	✓	✓	✓	✓	✓	✓	✓		✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	for use on polyester, polypropylene and vinyl base materials										polyester and vinyl base materials	
Fasson® 1 Mil Matte Clear Polyester/S8020/40#BG	#77843	✓	✓	✓	✓					✓		✓	✓	✓	✓	✓	✓	✓			✓	for use on polyester, polypropylene and vinyl base materials										polyester and vinyl base materials	
Fasson® 1M Matte PET/S8020/G80	MZ0112	✓	✓																		for use on polyester and vinyl base materials												
Fasson® 3 Mil Velvet Lexan/S730/1.5 Mil Polyester	#75849	✓	✓	✓	✓																for use on polyester and vinyl base materials										polyester and vinyl base materials		
Fasson® 5 Mil Velvet Lexan/S730/1.5 Mil Polyester	#75850	✓	✓	✓	✓																for use on polyester and vinyl base materials										polyester and vinyl base materials		
Transparent Polyester Materials																																	
Fasson® 1M Clear PET TC/S8020/B90	MZ0202	✓	✓			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
^Fasson® 2 Mil Clear Polyester TC/S333/50#SCK ABC	#72823	✓	✓			✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
^Fasson® 2 Mil Clear PET TC/S730/50#SCK ABC	#61320	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓			refer data sheet	
White Polyester Materials																																	
Fasson® 25mic White PET TC4/S333/BG50#WH ni	MZ0332	✓	✓							✓										✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Fasson® 2M WH PET TC/S333/BG50Wh	MZ0102	✓	✓			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
^Fasson® 2 Mil White Polyester TC/S730/50#SCK ABC	#40443	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓			refer data sheet	
Fasson® 2 Mil White Polyester TC/S8015/50#SCK ABC	#76656	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Fasson® 2M WH PET TC/S8049/50# SCK ABC	#79453	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				✓	✓				refer data sheet	
Fasson® 50mic Matte White PET TC/S333/BG50#WH	MZ0098									✓							✓				✓	✓	✓	✓	✓	✓		✓	✓				
Fasson® 50mic Matte White PET TC/DS017HT/BG50#WH	MZ0362	✓	✓	✓	✓	✓		✓	✓	✓				✓	✓	✓	✓				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Silver Polyester Materials																																	
Fasson® 50mic Bright Silver PET TC/S333/BG50# WH	MZ0054						✓	✓	✓	✓		✓			✓				✓	✓	✓	✓	✓	✓	✓	✓		✓	✓				
Fasson® 1M MAT CH PET TC/S333/BG40BI	MZ0152	✓	✓			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Fasson® 1M MAT CH PET TC/S333/BG50Wh	MZ0200	✓	✓			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Fasson® 2M MAT CH PET TC/S333/BG50Wh	MZ0104	✓	✓			✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
^Fasson® 2 Mil Matte Chrome Polyester TC/S333/50#SCK ABC	#72826	✓	✓			✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
^Fasson® 2 Mil Matte Chrome Polyester TC/S730/50# SCK	#41044	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓			refer data sheet	
Fasson® 2 Mil Matte Chrome Polyester TC/S8015/50#SCK ABC	#76660	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Fasson® 2M Matte Chrome Polyester TC/S8049/50# SCK	#79534	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓			refer data sheet	
Fasson® Copy Code CH PET Plus/S333/BG50Wh	MZ0106	✓	✓				✓	✓										✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Synthetic Paper																																	
Fasson® Synthetic Paper/S4700N/BG40Wh Imp	BW0153	✓																			✓	✓				✓	✓		✓	✓			
Fasson® 3 Mil Synthetic Paper/S333/BG50#WH	BW9664	✓								✓		✓					✓			✓	✓	✓	✓	✓	✓			✓	✓				
High Temperature																																	
Fasson® 25mic Gloss White PI HTC/S8088S/BG50# WH ni	MZ2001W	✓					✓	✓		✓					✓		✓				✓	✓		✓						✓			
Fasson® 25mic Matte White PI HTC/S8088S/BG50# WH ni	MZ2000W	✓					✓	✓	✓						✓		✓			✓	✓	✓		✓						✓			
Fasson® 50mic Gloss White PI HTC/S8088S/BG50# WH ni	MZ2003W	✓					✓	✓		✓					✓		✓				✓	✓		✓						✓			
Fasson® 50mic Matte White PI HTC/S8088S/BG50# WH ni	MZ2002W	✓					✓	✓	✓						✓		✓			✓	✓	✓		✓						✓			
Fasson® 1M Matte White PI TC/S8088/BG50#WH ni	MZ2000	✓					✓		✓	✓		✓			✓		✓				✓	✓		✓						✓			
Fasson® 25mic Matte White PI HTC/S8088/BG50# WH ni	MZ2020	✓					✓	✓	✓	✓							✓				✓	✓		✓						✓			
Drum																																	
Fasson® 127mic Inkjet Synthetic Paper/S333/BG40Wh Imp	OZ2400	✓				Inkjet ink for use with TM-C3500 printer; for details refer data sheet																						✓	✓		✓	✓	
Cable & Wire																																	
Fasson® 3 Mil Synthetic Paper 3/DS128S/BG50#WH	MZ4119	✓					✓								✓		✓			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Automotive																																	
Fasson® 2M WH PET TC/S8049/50# SCK ABC	#79453	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓			refer data sheet	
Fasson® 2M Matte Chrome Polyester TC/S8049/50# SCK	#79534	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓			refer data sheet	
Fasson® TRANSFER PET Matt White/S8049/BG42Wh BSS	AL854	✓	✓	✓	✓		✓	✓				✓	✓		✓			✓		✓		✓	✓	✓	✓			✓	✓			refer data sheet	
Fasson® TRANSF PET75 MATT WHITE/S8049/BG42WH BSS	AL851	✓	✓	✓	✓		✓	✓				✓	✓		✓			✓		✓		✓	✓	✓	✓			✓	✓			refer data sheet	
Fasson® TRANSF PET75 MATT SILVER/S8049/BG42WH BSS	AL850	✓	✓	✓	✓		✓	✓				✓	✓		✓																		

¹ see UL site or data sheet      ¹Product tested through CSA directly





Need more information?

Speak to your local **Avery Dennison** representative today -  
email us at [durablesupport@averydennison.com](mailto:durablesupport@averydennison.com)

#### WARRANTY:

The information in this document is based on test results, and represents our best understanding of compliance requirements. While this summary can help with the selection of durable goods labelling materials, the final responsibility for testing under real-world conditions rests with the converter or end user.

DISCLAIMER - All Avery Dennison statements, technical information and recommendations are based on tests believed to be reliable but do not constitute a guarantee or warranty. All Avery Dennison products are sold with the understanding that purchaser has independently determined the suitability of such products for its purposes. All Avery Dennison's products are sold subject to Avery Dennison's general terms and conditions of sale, see <http://terms.europe.averydennison.com>

©2017 Avery Dennison Corporation. All rights reserved. Avery Dennison and all other Avery Dennison brands, this publication, its content, product names and codes are owned by Avery Dennison Corporation. All other brands and product names are trademarks of their respective owners. This publication must not be used, copied or reproduced in whole or in part for any purposes other than marketing by Avery Dennison.

2017-10\_17969EN



Label and  
Packaging Materials

#### North Asia

5th Floor, Hongye Park  
1801 Hongmei Road,  
Xuhui District 200233,  
Shanghai, China  
+86 21 33951888

#### South Asia Pacific and Sub-Saharan Africa

460 Alexandra Road  
#28-02/03  
Singapore 119963  
+65 6430 7000

#### Europe

Willem Einthovenstraat 11  
2342 BH Oegstgeest  
The Netherlands  
+31 85 000 2000

#### Latin America

Rodovia Vinhedo-  
Viracopos, KM 77  
CEP 13280-000  
Vinhedo - SP, Brazil  
+55 19 3876-7600

#### North America

8080 Norton Pkwy  
Mentor, OH 44060  
800.944.8511