Avery Dennison Label and Packaging Materials Product Guide

Europe 2022





Materials and expertise for every part of the car

Each part of an automobile does a particular job. The same is true of our automotive labeling materials. Purpose-engineered to meet the specific demands of automotive components, our materials get the job done while meeting stringent regulations and specifications. Our technical experts can help you make sense of it all, so that you're able to finish with flying colors.



Key features

- The widest selection of materials to meet virtually any automotive need
- Purpose-engineered and pre-qualified for automotive, including EVs
- Low MOQs and short lead times
- Consultation from materials experts with deep automotive experience

Applications

Nearly any automotive application/Lightweight, difficult-to-label automotive components/ EV batteries and cables/Sealing, insulating and shielding in EVs



From bonnet to boot, the widest selection available

Interior, exterior, and under the hood: We have a material to match wherever the label is being applied. Need custom materials for a unique application? We can quickly develop those as well.

Everything EV



Electric vehicle production is soaring as legislation in Europe sets high targets to reduce CO₂ emissions. We have a close eye on this exciting market and recognize the need for label constructs engineered to address the various applications in EVs. Our EV and hybrid car battery solutions meet the standards for durability and perform under harsh conditions such as heat and chemical exposure. We represent a wide range of materials with proven adhesive technologies for labeling throughout electric vehicles, including solutions for thermal conductivity, high-shear adhesives, and solutions for insulating, shielding and sealing RFID-enabled materials for cables and harnesses.

Compliant materials for quick qualification

Our materials meet industry standards broadly, and our technical teams can help converters, OEM's and tier suppliers qualify against all required specifications, including IATF 16949, UL, CSA, IMDS, ISO, FMVSS 302 and others. Our labs can test for compliance under nearly any condition; our compliance team tracks evolving regulations so that our customers know about them well in advance.





Connect the physical with the digital using RFID

RFID inlays provide automotive items with a unique digital ID that connects them to the Internet of Things and provides businesses with unparalleled supply chain transparency. Our RFID solutions paired with standard label constructs bridge the physical with the digital to track and trace, increase supply chain transparency and more. For example, a Midas Flagtag RFID inlay paired with a standard label for applications on metal enables visibility into product authentication and asset management.

RHA: An adhesive technology engineered for today's automobiles

As automotive components are lightweighted and made easier to clean, typical adhesives don't provide sufficient adhesion. Our specially designed rubber hybridized adhesive technology (RHA) delivers high-peel adhesion levels, along with the chemical and temperature resistance required for automotive operating conditions. RHA is available on standard face materials and can be paired with different facestocks upon request. Its special engineering makes it easier to convert than comparable heavy-coat adhesives.

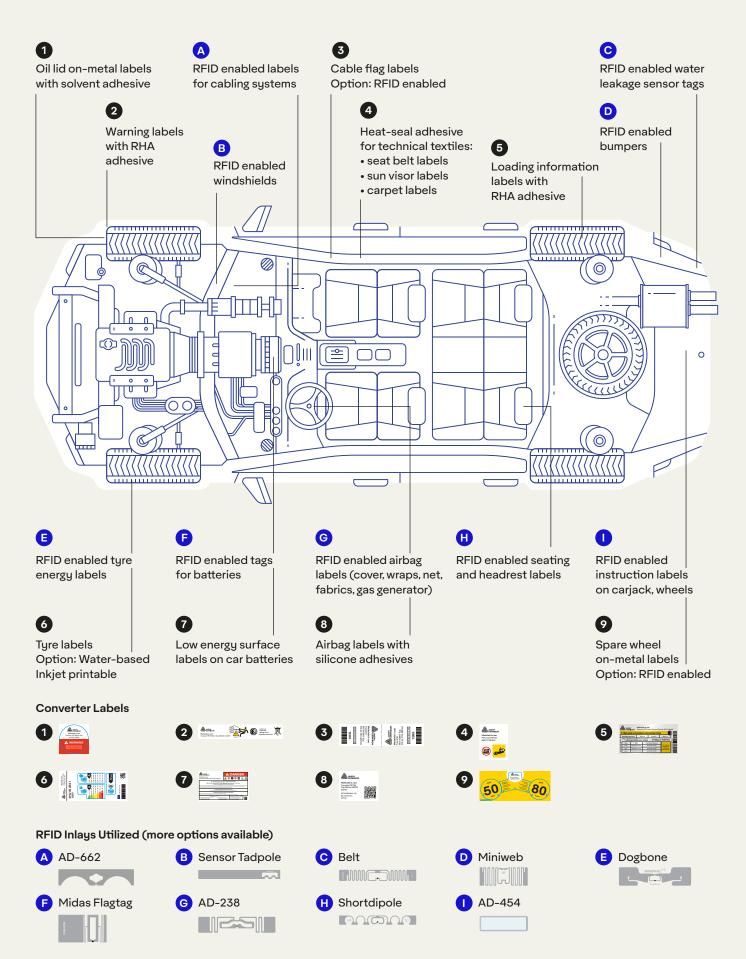
Selection of OEM Specifications

Manufacturer	Specification	Description
Tord	WSS-M99P41-A10/A72	Performance requirements for all Ford vehicle labels
FIAT CHRYSLER AUTOMOBILES	MS-13445	Performance requirements for Chrysler labels
	TL 52038	VW labels, self adhesive, material requirements
<u>GM</u>	GMW14573	Global performance requirements for labels
TESLA	TM-0030T-Y	Tesla self adhesive labels, interiors; exteriors
8	GS 97058	BMW self adhesive labels, requirements, testings
® НҮППДӨІ	MS 373-12	Hyundai / Kia interior and exterior label specification
Mercedes-Benz	DBL 8230	Mercedes-Benz requirements for self-adhesive labels
* ТОУОТА	TSM7508G	Toyota quality standard of materials for labels



Labeling solutions for automotive applications

Offering a broad range of benefits for the automotive industry, we provide labels for nearly every application that can be infused with a digital identity - improving efficiency for automotive manufacturers.



Automotive Label Portfolio

Application	Code	Product Name	UL Recognition	MOQ(m²)	Ready for shipment (days)
Metal (with AL170 featuring excellent chemical resistance)	AA642	Transfer PET White Top AL170-BG42WH	Yes	100	(EXT) 1
	AA145	Transfer PET Matt White AL170-BG42WH	Yes	100	(EXT) 1
	AA645	Transfer PET Matt Chrome Top AL170-BG42WH	Yes	125	(RW) 1
	AA146	Transfer PET Matt Silver AL170-BG42WH	Yes	100	(EXT) 1
	BS912	Transfer PET Platinum TC19 AL170-BG45WH FSC	Yes	300	7
Paint and plastics	BN947	Transfer PET White Top S8029-BG42WH	Yes	300	1
	BN949	Transfer PET Matt White S8029-BG42WH	Yes	300	7
	BH781	Transfer PET Matt Chrome Top S8029-BG42WH	Yes	300	7
	BN950	Transfer PET Matt Silver S8029-BG42WH	Yes	300	7
	BS913	Transfer PET Platinum TC19 S8029-BG45WH FSC	Yes	300	7
Rough and low surface energy plastics	AJ059	Transfer PET White Top S8049-BG42WH BSS	Yes	125	(RW) 1
	AL854	Transfer PET Matt White S8049-BG42WH BSS	Yes	300	7
	AL852	Transfer PET Matt Chrome Top S8049-BG42WH BSS	Yes	300	7
	AJ060	Transfer PET Matt Silver S8049-BG42WH BSS	Yes	300	7
Interiors	BJ330	Transfer PET White Top S8002-BG42WH	Yes	100	(EXT) 1
	BU455	Transfer PET Matt White TC20 S8002-BG42WH	Yes	100	(EXT) 1
	BL799	Transfer PET Matt Chrome Top S8002-BG42WH	Yes	100	(EXT) 1
Textiles and PVC	CI832	Transfer PET White PT S8073-BG45WH FSC	No	1,000	On demand
(with heat-activated adhesive)	CK199	Transfer PET125 White S8073-BG45WH FSC	No	1,000	On demand
	CK123	PET23 Clear S8073-BG45WH FSC	No	1,000	On demand
	CI892	PET25 MATT WH OPQ \$8075-PET23	No	1,000	On demand
Siliconised fabrics	AS191	Transfer PET36 Top White S8092-PET75	No	500	(RW) 1
Security and VOID	AB048	PET VOID Check Matt Chrome S8015 BG42WH	Yes	300	(EXT) 1
	AV544	PET VOID Check Matt Chrome S8039 BG42WH BSS	No	500	7
Laser Marking	BY086	PET50 Black Laser Etch S8029-BG45WH FSC	Yes	300	7
Overlamination film	AA647	Overlaminating PET 25 AL170-HF80	Yes	100	(EXT) 1
Overlamination film with 70% recycled content	BZ034	rPET23 Top Clear AL170-rPET23	No	1,000	7

Day(s) = Business day(s) (EXT) = Fasson®EXACT

(EXT) = Fasson®EXACT™ service (RW) = Fasson® Ready Width™ service



EV Battery Portfolio

Application	Code	Product Name	UL Recognition	MOQ(m²)	Ready for shipment (days)
Cell bonding adhesives	Al337	TT BG40 White LR AL170-BG40WH HR	No	300	7
	BR517	Π BG40 White LR S8029-BG45WH	No	300	7
	AO530	TT BG50 White S8049-BG50WH BSS	No	300	7
Cell wrapping + insulating	AE423	Transfer PET Trans Top AL170-BG50WH FSC	Yes	300	7
	Various	Transfer PET Clear/Coloured films	No	1,000	On demand
Extreme chemical resistance	BJ140	Transfer PET White CR AL170-BG42WH	Yes	300	7
	CH361	Transfer PET Silver CR AL170-BG42WH	Yes	300	7
Flame retardant materials	BN142	Transfer PET40 White Top FR - AL170 - BG40WH LR	Yes	300	7
	BO772	PVC Outdoor White - S8029 - BG45WH	Yes	300	7
High dielectric strength material	BL507	PET175 PT White S8039-PET30	No	1,000	7

Day(s) = Business day(s)

(EXT) = Fasson®EXACT™ service (RW) = Fasson® Ready Width™ service





RFID Inlay Portfolio

Application*	Item	Inlay model **	Dimensions	Description
Interiors	AD Twist		27 x 27mm	Near-metal label
	MiniWeb	(-)	42 x 16mm	Standard inlay
Exteriors	DogBone	DogBore DogBore	94 x 24mm	Standard inlay
	Skyline ETSI		54 x 25mm	Folded on-metal label
Under the hood	Midas Flagtag	SMARIBAC	47 x 18 / 32 x 18mm	Flagtag on-metal label
	Belt	Belt	70 x 10mm	Standard inlay

^{*} Multiple end applications per products are possible ** Not to scale

Regardless of tagging requirements, Avery Dennison can help you build the right solution with our family of label materials and intelligent labels RFID technologies. We have many options available and have listed only our top recommendations. For more, visit our RFID labels for automotive quick guide.

Start your engines

We're here to answer your questions and help you envision possibilities. Contact your usual sales representative, or visit <u>label.averydennison.com</u>

For more information on technical performance and printing recommendations, please refer to the respective datasheets. Please note that the Avery Dennison product range and service offering can be subject to changes. For an accurate overview, please check our website label.averydennison.eu or contact your local Avery Dennison sales representative.



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