Small diameter labelling

Pharmaceutical containers, bottles, test tubes and syringes, are small with typical volumes of 1-100 ml and diameters of 7-50 mm. Demand for these containers is growing rapidly, thanks to patient benefits that include dosage accuracy and sterile conditions.

Only the most advanced adhesive technology can cope with such small container diameters, and with low-energy surfaces such as polyethylene and polypropylene. Avery Dennison's small-diameter pharmaceutical portfolio offers the excellent mandrel performance that is essential for successful conversion and high speed dispensing.

Options include S692NP adhesive with exceptionally low-migration (important as plastic use grows), and S717P which minimises edge lift on low surface-energy substrates down to 10 mm in diameter.

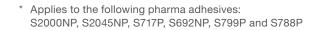
Luminescent topcoats for syringes and vials are now available to give label converters far better flexibility in adhesive selection. Pharmaceutical manufacturers benefit from faster qualification times, since the luminescent topcoats can be combined with previously qualified adhesives.

Application areas

- Prescription medicines or drugs
- Over-the-counter (OTC) products
- Auto-injector pens for diabetics, autoimmune deficiencies and more
- Pre-filled syringes and vials
- Small diameter containers: 7-50 mm diameter
- Glass, PE and PP substrates (including treated, slip-coated or varnished)
- Low migration labels for thin-walled LDPE containers
- Any application requiring excellent mandrel performance

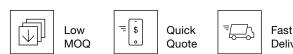
Key features

- Outstanding mandrel performance on small diameter containers
- Availability and change notification 12 months in advance*
- Compliance with FDA and European food regulations





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Delivery

Meeting the pharmaceutical compliance challenge

All manufacturers of pharmaceutical packaging have to meet the challenges posed by new regulations and stronger packaging guidelines. There is growing pressure to understand rules in detail, and to make absolutely sure every package is compliant. That means rising demand from pharmaceutical companies for customised tests and individual packaging material certification.

The Avery Dennison Pharma and Compliance Team is always on hand to give converters and pharmaceutical companies detailed information, and technical support. These are useful resources when navigating the complexities of pharmaceutical applications and making sure the end result is both successful and compliant. ***

Label and plastic packaging solutions should comply with the following:

- European food regulation 1935/2004/EC, including 10/2011/EU guidance on plastic materials and articles intended to come into contact with food
- ISO 3826 a norm that explains how to test plastics collapsible containers for human blood and blood components FDA 175.105 Food and Drug Administration (FDA) concerning indirect food additives, adhesives and components of coatings
- ISO 10993-5 dedicated test for vitro cytotoxicity**
- ISO 10993-10 test for irritation and skin sensitization**

		1935/2004/EC Food Contact	ISO 3826-1	FDA 175.105	Included in Drug Master File U.S.
Guideline on	S2000NP	✓	~	~	✓
Immediate	S692NP	✓	~	~	✓
Plastic S2045NP	S2045NP	✓	~	✓	✓
Fackaging	Packaging S717P	✓	✓	~	✓
Cold Chain	AL171		~	~	
Labelling	C2020P	~	~	~	
	S2060NP	✓	~	~	✓
S2196	S2196	✓	~	✓	
	C0196				
Security	S788P	~	~	~	
Labelling	S799P	~	~	~	

** Information about ISO 10993 Medical Device compliance available on request

*** The Marketing Authorisation Holder is ultimately responsible for ensuring that technical and regulatory compliance is fulfilled

Small diameter labelling Product information

Product information	duct information			Adhesion			Mandrel Hold Glass			landr Id Gla PE /	ass	Ste	rilisa	tion					Θ			
Code Product description	Basis weight [gsm/m²]	Caliper [µm]	Paper	Film	Semi Gloss	Gloss	on Glass	on PE / PP	Ø 7 mm [0,5 ml]	Ø 10 mm [1,25 ml]	Ø 20 mm	Ø 10 mm [2 m]	Ø 16 mm [10 ml]	Ø 22 mm	Autoclave	Etox	Gamma	Luminescent (Laetus Scale)	Low Migration Risk	Dispensing	Chemical Resistance	Low Temperature Performance
AE082 LW FSC S2000NP-BG40WH FSC	62	55	~		~		••	••	•	~	~	~	~	~	~	~	~	9		•	•	
AM207 LW FSC S2045NP-BG45WH IMP FSC		55	~		~		•••	•••		~	~	~	~	~				9		•		•
AH431 LW FSC S692NP-BG40WH FSC		55			✓		٠	•		~	~	~	~	~	~	~	~	9	~	•	•	•
AO865 LW FSC S692NP-PET36		52			~		•	•		~	~	~	~	~	~	~	~	9	~	••	•	•
AA024 LW60 FSC S451-BG45WH IMP FSC		55			✓		•••	•••		~	~	~	~	~	~	~	~	9		•	•	••
BC932 MC Pharma FSC S717P-BG45WH		52			~		••	••	~	~	~	✓.	~	~	~	~	~		~	•	•	•
AT440 MC Pharma FSC S2000NP-BG40WH FSC		52			✓		••	••	~	~	~	~	~	~	~	~	~			•	•	
AS495 MC Pharma FSC S692NP-BG40WH FSC		52			~		•	•		~	~	~	~	~	~	~	~		~	•	•	•
AX236 MC Pharma FSC S692NP-PET30 BC932 MC Pharma FSC S717P-BG45WH		52 52			~		•	•		~	~	~	~	~	~	~	~		~	••	•	•
BB544 MC Primecoat FSC S2000NP-BG40BR		52 69	~		✓ ✓			•••	~	~	~	~	~	~	~	×	~		~	•		•
AT021 MC Primecoat FSC S2000NP-PET23		69	 		×		•••	•••			V			×	×	×	~			•	•	
BL308 MC90 FSC S2000NP-BG40BR		78	~		•		•••	••			 			¥	× 	¥ 	× 			•	•	
BJ882 Gloss FSC S2000NP-BG40WH FSC		65	* •		v		••	••			~			•	•	•	•			•	•	
AL738 HGW Premium FSC S2000NP-BG40WH FSC						¥	••	••		•	v		•	¥	¥ 	¥	*			•	•	
AE947 PE85 Top White S692NP-BG40WH FSC	82		•	~		¥ •	•	•			*			*	•	*	*			•	•	•
BL557 PP30 Top White S717P-BG40WH	23			~		~	••	••				¥ •	-	~		J	•		-	•	•	•
BJ918 PP30 Top White S692NP-BG40WH	23			~		-	•	•	J		•	J	-	·	J	·			5	•	•	•
BJ231 PP40 Cavit White S717P-BG45WH	40			~			•	•			~	~		J.		J.				•	•	•
AO271 PP Light Top White S692NP-PET30		49		~			•	•	•			J		~		~				••	•	•
BD522 PP Light Top White S717P-BG45WH		49		~		~	••	••	~	~	~	~	~	~	~	~			~	•	•	•
AE948 PP Top White S692NP-BG40WH FSC		57		~		~	•	•		~	~		~	~	~	~			~	•	•	•
BL291 Primax II S692NP-BG40WH		63		~	~		•	•	~	~	~	~	~	~		~	~		~	•	•	•
AJ053 Primax II S692NP-PET30	65	63		~	~		•	•	~	~	~	~	~	~		~	~		~	••	•	•

Syringe, auto injector, ampule labelling Product information

	Front			Mandrel Adhesion Hold Glass				Mandrel Hold Glass HDPE / PP														
Code Product description	Basis weight [gsm/m²]	Caliper [µm]	Paper	Film	Semi Gloss	Gloss	on Glass	on PE / PP	Ø 7 mm [0,5 ml]	Ø 10 mm [1,25 ml]	Ø 20 mm	Ø 10 mm [2 ml]	Ø 16 mm [10 ml]	Ø 22 mm	Autoclave	Etox	Gamma	Luminescent (Laetus Scale)	Low Migration Risk	Dispensing	Chemical Resistance	Low Temperature Performance
AY389 PP30 Top Clear S692NP-BG40WH	27	30		~		~	٠	٠	~	~	~	~	~	~	~	~			~	•	٠	•
BF405 PP30 Top Clear S692NP-PET30	31	27		~		~	٠	•	~	~	~	~	~	~	~	~			~	••	•	•
AX203 PP30 Clear S4000N LUM-PET30	27	30		~		~	٠	٠	~	~	~	~	~	~	~	~		5		••	٠	
AX207 PP NG Top Clear S4000N LUM-PET36	46	50		~		~	٠	٠		~	~	~	~	~	~	~		5		••	•	
AN869 PP NG Top Clear S692NP-BG40WH	46	50		~		~	٠	٠		~	~	~	~	~	~	~			✓	•	•	•
AN499 PP Light Top Clear S692NP-PET30	44	49		~		~	٠	•		~	~	~	~	~	~	~			~	••	•	•
BF237 PP Light Top Clear S717P-BG45WH	44	49		~		~	••	••	~	~	~	~	~	~	~	~			✓	•	•	•
AG629 PP NG Top Clear S697 LUM-PET36	46	50		~		~	•••			~	~				~	~		9		••	••	
AA844 PP NG Top Clear S700-BG40WH	46	50		~		~	•••	٠	~	~	~			~	~	~				•	••	
AN873 PP NG Top Clear S700-PET30	46			~		~	•••	٠		~	~		~	~	~	~		9		••	••	
AE091 PP NG Top Clear S700-PET36	46			~		~	•••	٠	~	~	~			~	~	~				••	••	
AN872 PP NG Top Clear S700 LUM-PET30		50		~		~	•••	٠		~	~		~	~	~	~		9		••	••	
EC162 PP50 Top Clear MP318N-PET36 HR	47	50		~		~	•••		~	~	~				~	~				••	••	
EC163 PP50 Top Clear MP318N LUM-PET36	47	50		~		~	•••		~	~	~				~	~		6		••	••	
AE949 PP Top Clear S692NP-BG40WH FSC	52			~		~	٠	٠		~	~		~	~	~	~			✓	•	•	•
AX204 PP Top Clear S4000N LUM-PET30	52			~		~	٠	•		~	~		~	~	~	~		5		••	•	
AA661 PP Top Clear S700-PET30	52	57		~		~	٠	٠		~	~		~	~	~	~				•	•	
AX206 PET36 Top Clear S4000N LUM-PET36	50	36		~		~	٠	•		~	~	~	~	~	~	~	~	5		••	•	
BL148 PET36 Top Clear MP318N LUM-PET36	50	36		~		~	••		~	~	~				~	~	~	6		••	•	•
BQ266 PET36 Top Clear LUM S517N-PET36	51			~		~	••		~	~	~				~	~	~	7		••	•	٠
BQ765 PP50 Top Clear LUM S799P-BG45WH FSC				~		~	٠	•		~	~		~	~	~	~				•		•
BO872 PP40 Top Clear S697 LUM-PET36	51			~		~	٠	•		~	~		~	~	~	~		6		••		•
EC169 PET36 Top Clear MP318N-PET36	50	36		~		~	••	•		~	~	~	~	~	~	~	~			••	••	•

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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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