

Technical specification sheet

Ball & Doggett

ballanddoggett.com.au

Physical Characteristics:

Property		Value
Caliper, face		3.4 mil (86 µm)
Caliper, adhesive		1.0mil (25 µm)
Dimensional stability		<0.035"(0.89 mm) Note: Ink loads in excess of 250% may cause increased shrinkage of the printed film.
Tensile at Yield		9.0 -15.0 lb/in (1.6 - 2.7 kg/cm)
Elongation		100% min.
Gloss	Hunter Gloss @ 60	<16
Adhesion (24 hr.)		
	LSE Plastics	4.1 lbs/in (718 N/m)
	LSE Clearcoats	4.3 lbs/in (753 N/m)
	LSE Paints	4.5 lbs/in (788 N/m)
	LSE Textured substrates	3.5 lbs/in (613 N/m)
	Stainless Steel	5.5 lbs/in (963 N/m)
	LSE – Low Surface Energy	
Flammability		Self Extinguishing
Shelf-Life		2 years from date of manufacture when stored at the following temperatures and humidity conditions 68°-77° F (20° - 25° C) and 50±5% R. H.
Durability	Vertical Exposure	6 years
Opacity		99.6%
Min. Application Temperature		40° F (4° C)
Service Temperature		-40° to 180 °F (-40° to 82° C) (Reasonable range of temperatures which would be expected under normal environmental conditions).
Chemical resistance		Resistant to most mild acids, alkalis, and salt solutions. Resists exposure to fuel vapors and occasional fuel spills.

Revisions are italicized

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Data represents average values where applicable, and is not intended for specification purposes.

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IMPORTANT INFORMATION:

Isopropyl Alcohol (IPA) along with some strong solvents and acids react with the urethane film. Prolonged exposure (soaked cloth, immersion, etc.) should be avoided to prevent damage to the film. Brief exposure with IPA to clean the surface is possible as long as the exposed area is wiped dry with a clean cloth immediately after. It is highly recommended that all cleaning liquids be properly tested to ensure compatibility with the film.

Fuel (gasoline) spills should be cleaned immediately. Rinse the area with water or a mild detergent and water mix and dry.

Special Considerations:

When overlaminating UV printed graphics: Heat assist and increasing lamination pressure when applying the overlaminate will reduce the silvering that can occur when laminating UV printed graphics. Do not exceed 115° F (46° C) on the top or bottom roll. Roll pressure up to 100 psi may be used. When applying the overlaminate in this manner, use the minimum amount of unwind tension on the overlaminate to reduce stretching during application.

Related Documents:

The following Avery Dennison® literature will provide complete information to the user for proper application, storage, and other requirements and is available upon request from your Avery Dennison representative or from the Avery Dennison website (www.graphics.averydennison.com).

Document Title	Reference Number
Substrate Cleaning and Preparation	Instructional Bulletin #1.10
Storage, Maintenance, and Cleaning of PVC Films	Instructional Bulletin #1.20
Warranty of Films	Instructional Bulletin #1.30
Cleaning and Maintenance of Vehicle Wraps	Instructional Bulletin #1.50
Tips for Overlaminating, Premasking & Packaging Graphics	Instructional Bulletin #5.50
Removal Instructions	Instructional Bulletin #4.10

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