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PRODUCT BULLETIN

U.L.® Recognized GHS Gerber PermaGrip™ Label Stock

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DESCRIPTION

Gerber PermaGrip™ Label Stock is a dimensionally stable, polyester-based film that resists tearing, abrasion and heat. It has been formulated for use with the GERBER EDGE®, GERBER EDGE 2®, and GERBER EDGE FX™ thermal transfer printing systems, in conjunction with GerberColor™ Foils. It has an extremely aggressive adhesive for use on low surface energy substrates. It is edge-stripped to eliminate build up of adhesive residue on sprocketed equipment. U.L. recognized Gerber PermaGrip Label Stock is available in 2-mil White and is formulated for both interior and exterior applications.

INTENDED APPLICATIONS

Gerber PermaGrip Label Stock is ideally suited for a wide variety of commercial and industrial label applications in which durability, heat resistance and dimensional stability are required.

This film is not intended for backlit or vehicle applications. It should be applied to flat surfaces that are clean and dry.

APPLICATION TECHNIQUES

Dry application methods should be used with Gerber PermaGrip Label Stock and panels should be butted.

Gerber standard tack application tape is required for all EDGE-printed graphics.

SUBSTRATE PREPARATION

Before applying your graphic, wash the surface of your substrate with warm water and detergent. Do not use soaps or other cleaners with lotions or creams as they will leave a residue. Thoroughly rinse the surface and allow it to completely dry.

Saturate a clean paper towel with a solvent-based cleaner and wipe the substrate surface. Be certain to follow all manufacturer safety guidelines when using any solvent. Dry the surface with a lint-free paper towel before the solvent evaporates. If applying to glass, solvent wipe the surface with a 2 to 1 mixture of water and isopropyl alcohol. Glass temperatures can vary across the surface. These temperature variations can produce stresses which may cause the glass to break. Use caution when applying to glass.

Many paint systems (e.g. two-part urethane) and some polycarbonate substrates will outgas if they are not fully cured. Outgassing can cause permanent bubbling in most films; substrates should be tested for outgassing prior to final application.

PERFORMANCE LIFE (UNPRINTED)

Gerber PermaGrip Label Stock has an expected exterior durability of up to two years when applied vertically.

Performance statements are based upon field experience and exposure tests conducted throughout the United States. Substrate selection, exposure angle, environmental conditions, and maintenance of markings will affect actual performance. Continuous exposure in regions that experience maximum sunny days will result in decreased performance. Extreme temperature cycling over a short time may result in film cracking. This product is not recommended for horizontal applications.

PRINTING

Use 2-mil White Label Stock settings in your software selection palette. If not available, use Gerber HP Series 220 normal print settings.

GerberColor Spot (GCS), GerberColor Process Pro™ CMYK (GCP), GerberColor Medal (GCM), and GerberColor Transparent (GCT) Series Foils can be used to print onto Gerber PermaGrip Label Stock. If your application requires a U.L. recognized component construction, be certain to use only the GerberColor Series that have the following U.L. recognition sticker:

Recommended working environment is as follows:

- Operating temperature: 50ºF to 95ºF / 10ºC to 35ºC
- Recommended temperature for assured printing accuracy: 68ºF to 78ºF / 20ºC to 26ºC
- Operating humidity: 20% to 90% relative humidity, non-condensing (maximum range; actual range varies by material used)

CUTTING

Gerber PermaGrip Label Stock can be cut on any 15-inch EDGE-compatible sprocketed plotter. A 30° SuperSharp blade is recommended. Plotters can be set to full speed.

PROTECTING GRAPHICS

Gerber Technology offers products that are designed to protect printed graphics.

Gerber Guard™ manufactured by 3M is a durable, dimensionally stable, glossy vinyl overlaminate. This film has a petrochemical-resistant construction and is intended to be used when markings may be exposed to petrochemical spillage and/or severe handling conditions.

Gerber UVGuard™ is a custom-formulated, 1-mil, clear, TEDLAR® polyvinyl fluoride (PVF) laminating film designed to further expand the resistance to weathering of printed graphics for up to five years.

Gerber UVGuard™ 9 manufactured by 3M is a 2-mil, glossy, clear, mildew-resistant, polyvinyl fluoride laminating film with a petrochemical-resistant adhesive system. It is designed to further expand the resistance to weathering of printed graphics up to nine years. Gerber UVGuard 9 has the highest protection from UV fade.

Gerber StrikeGuard™ is an 8.0-mil, clear, glossy overlaminate film designed for a variety of applications. This heavy-duty overlaminate film is ideal for the protection of graphics, up to two years, and is especially beneficial where printed graphics experience severe handling and forceful impact. Gerber StrikeGuard is not recommended in applications that require petrochemical protection or where additional UV or vandal resistance is desired.

Abrasion Guard™ SPF (Sign Protection Formula) is a clear, top-coat GerberColor Finishing Series (GCF) Foil designed for use with EDGE® Series thermal transfer printing systems, to protect graphics from moderate contact and exposure to harmful effects of UV rays. It has an expected performance life of five years (when printed by itself). When applied as a protective overprint on other GerberColor Foils, Abrasion Guard SPF will extend the life of the base color by up to 30%.

Matte Clear is a clear matte finish, top coat GerberColor Foil designed for use with EDGE® Series thermal transfer printing systems, to reduce glare and protect graphics from moderate contact or handling. It has an expected performance life of three years.

SHELF LIFE AND STORAGE

Apply film within one year of receipt. Printed graphics should also be applied within one year. Film and printed graphics (with or without premask) should be kept in a clean area free from excessive moisture and direct sunlight. Maintain temperature at 70°F (21°C) and humidity at 50%.

Use a paper interleaf between layers of stacked or rolled printed materials. Do not stack printed graphics face to face.

MAINTENANCE

To clean printed graphics, use a mild, non-abrasive soap with a soft cloth or sponge. Avoid using alcohol-based cleansers or soaps containing grit or abrasives.

U.L. RECOGNITION

Gerber PermaGrip Label Stock has been recognized for use by Underwriters Laboratories, Inc.® on several different types of substrates through differing temperature extremes.
The U.L. file number is MH25192. It is UL969 certified, UL file number PGJI2.MH25192.

GERBER PERMAGRIP LABEL STOCK UL RECOGNITION DATA TABLE

USS – Standard UL 969, "Marking and Labeling Systems"

Application Surface	Temp (ºC)		Indoor	Outdoor	Additional
	Max	Min	Use	Use	Conditions
Acrylic paint	150	-40	✓	✓	-
Alkyd paint	150	-40	✓	✓	-
Aluminum	150	-40	✓	✓	-
Epoxy paint	150	-40	✓	✓	-
Epoxy/Polyurethane powder paint	150	-40	✓	✓	-
Galvanized steel	150	-40	✓	✓	-
Glass	150	-40	✓	✓	-
Polyester paint	150	-40	✓	✓	-
Polyester powder paint	150	-40	✓	✓	-
Polyurethane powder paint	150	-40	✓	✓	-
Porcelain	150	-40	✓	✓	-
Stainless Steel	150	-40	✓	✓	-
Epoxy powder paint	125	-40	✓	✓	-
Melamine	100	-40	✓	✓	-
Nylon – polyamide	100	-40	✓	✓	-
Phenolic – Phenol Formaldehyde	100	-40	✓	✓	-
Unsaturated polyester – thermoset	100	-40	✓	✓	-
Acrylonitrile butadiene styrene	80	-40	✓	✓	-
Polybutylene terephthalate	80	-40	✓	✓	-
Polycarbonate	80	-40	✓	✓	-
Polyethylene	80	-40	✓	✓	-
Polyphenylene oxide/ether	80	-40	✓	✓	-
Polyproylene	80	-	✓	-	-
Polystyrene	80	-40	✓	✓	-
Polyvinyl chloride	80	-40	✓	✓	-

PHYSICAL PROPERTIES

Thickness	2 mil (See Description)
Film Color	White
Adhesive	Pressure sensitive
Adhesive Color	Clear
Liner	90-lb layflat
Tensile Strength	N/A
Elongation	0
Dimensional Stability	No measurable shrinkage
Application Temp	32°F to 100°F (0°C to 38°C)
Service Temp	-40°F to 302°F (-40°C to 150°C)
Removal Temp	N/A

CHEMICAL RESISTANCE (UNPRINTED)

Chemical Agent	Result
Household cleaners	No effect
Mild acids	No effect
Motor Oil	No effect
Water	No effect

ADHESION PROPERTIES (Test Method ASTM D 3330)

Peel From Substrate:	Average 15 Minutes		Average 3 Days Room Temperature		Average 3 Days 160 ºF	
	Oz/in	(N/m)	Oz/in	(N/m)	Oz/in	(N/m)
ABS	36	(396)	60	(660)	59	(649)
Acrylic	56	(616)	70	(770)	61	(671)
Aluminum	48	(528)	62	(682)	92	(1012)
HDPE	27	(297)	32	(352)	37	(406)
Lexan (Bare)	50	(550)	57	(627)	64	(704)
Metal-Painted (alkyd enamel)	49	(539)	58	(639)	89	(979)
Powder Paint Acrylic	43	(473)	61	(671)	81	(891)
Powder Paint Epoxy	50	(550)	62	(682)	82	(902)
Powder Paint Polyester	32	(352)	33	(363)	65	(715)
Powder Paint Polyurethane	45	(495)	6	(66)	87	(957)
Stainless Steel	42	(462)	61	(671)	107	(1177)

RELATED LITERATURE

Refer to Product Bulletins of relevant foils and materials for product-specific handling, production, and finishing information.

CONTACT INFORMATION

Graphic Marking Systems • 800-232-8018 • www.ShopGMS.com

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GHS (Globally Harmonized System)

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