

Gerber ImageCast™ Clear Vinyl manufactured by 3M

DESCRIPTION	1
INTENDED APPLICATIONS	1
PERFORMANCE LIFE (UNPRINTED)	1
SHELF LIFE AND STORAGE	2
PRINTING	2
PROTECTING GRAPHICS	2
CUTTING	3
SUBSTRATE PREPARATION	3
APPLICATION TECHNIQUES	3
MAINTENANCE	3
PHYSICAL PROPERTIES.....	3
CHEMICAL RESISTANCE (UNPRINTED)	4
RELATED LITERATURE.....	4
CONTACT INFORMATION	4

DESCRIPTION

Gerber ImageCast is a 2.5-mil, durable, clear, cast vinyl custom formulated for use with the GERBER EDGE®, GERBER EDGE 2®, and GERBER EDGE FX™ thermal transfer printing systems, in conjunction with GerberColor™ Foils.

INTENDED APPLICATIONS

Gerber ImageCast is ideally suited for exterior emblems, signs, and point of purchase displays. Because the vinyl and adhesive are clear, Gerber ImageCast can be used for window and second-surface applications. The user should determine the suitability of all substrates prior to actual application.

This film is not recommended for use on surfaces with corrugations and compound curves. It is also not intended for applications where petrochemical contact may occur. If petrochemical exposure is anticipated, refer to the section below on protecting graphics.

PERFORMANCE LIFE (UNPRINTED)

Gerber ImageCast has an expected performance life of up to five 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. This product is not recommended for horizontal applications.

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 less than 100°F (38°C) and 50% relative humidity.

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

PRINTING

If your software material selection palette does not have Gerber ImageCast, use 3M Series 220 or 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 ImageCast.

Recommended working environment is as follows:

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

PROTECTING GRAPHICS

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

Gerber Guard™ manufactured by 3M is a durable, dimensionally stable, glossy vinyl overlamine. 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 overlamine film designed for a variety of applications. This heavy-duty overlamine 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 up to 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 up to three years.

CUTTING

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

A test cut should be performed to determine the ideal tool force setting.

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.

Some polycarbonate substrates may weaken when certain vinyl films are applied to them. Because of this possibility, the user will need to determine if safety items such as helmets, safety shields, and some windshields are compatible with their vinyl's adhesive.

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.

APPLICATION TECHNIQUES

Wet or dry application methods can be used with Gerber ImageCast and panels can be overlapped or butted.

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

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. Automated vehicle washing systems with rotary brushes should also be avoided.

PHYSICAL PROPERTIES

Thickness	2.5 mils
Film Color	Clear
Adhesive	PSA
Adhesive Color	Clear
Liner	78-lb kraft paper

Dimensional Stability	.007 in (.2 mm)
Operating Temperature	-40°F to 225°F (-40°C to 93°C)

CHEMICAL RESISTANCE (UNPRINTED)

Chemical Agent	Exposure Time	Result
Water	24 hours	No effect
50/50 Ethylene glycol water	24 hours	No effect
Reference Fuel	1 hour	Slight film softening
SAE 20 motor oil	24 hours	No effect
#1 diesel fuel	1 hour	Edge lifting
10% Hydrochloric acid	10 minutes	No effect
10% Ammonium Hydroxide	10 minutes	No effect
Mineral spirits	10 minutes	No effect
Methyl Alcohol	10 minutes	No effect
VM & P Naphtha	10 minutes	No effect

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

When sold by Gerber, use only the corresponding Gerber Product Bulletin to determine product details, including but not limited to appropriate uses, warranty and processing.

EDGE, GERBER EDGE, GERBER EDGE 2, Gerber Scientific Products, GerberCal, GerberGraphics, GRAPHIX ADVANTAGE, GSP, and Images on Vinyl are Registered Trademarks of Gerber Technology.

Abrasion Guard, ColorSet, EDGE Positive, EDGE READY, Gerber AutoMag, GERBER EDGE FX, Gerber FastFacts, Gerber Guard, Gerber HoloGraphix, Gerber ImageCal, Gerber ImageCast, Gerber InstaChange, Gerber OMEGA, Gerber PermaGrip, Gerber PlastiGraphix, Gerber QUANTUM, Gerber Stardust, Gerber StrikeGuard, Gerber Tone, Gerber UVGuard, GerberCal, GerberColor, GerberColor Spectratone, GerberGauge, GerberGlow, GerberMag, GerberMask, GerberVision, GS 15, GS15plus, GSP Plot, GSxplus, GSx, ImagePerfect, IMAGE READY, LexEdge, Matched Technology System, MTS, ODYSSEY, OMEGA, Process Pro, SpectraShade, and SpectraTint are Trademarks of Gerber Technology.

TEDLAR is a registered trademark of DuPont.

3M is a trademark of 3M Company.

©2015 Gerber Technology. All Right Reserved

Category: EDGE READY™	FastFact #: 5544	Supplied by: Aftermarkets	Last Modified: 09/03/15
-----------------------	------------------	---------------------------	-------------------------