



# Gerber High Performance Series 230 Translucent

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## DESCRIPTION

Gerber High Performance Series 230 is a high performance translucent film made exclusively for Gerber. Series 230 is a durable, dimensionally stable film with a clear, pressure-sensitive adhesive designed to withstand a variety of severe weather and handling conditions. It is available in a variety of colors and is an EDGE READY™ material in 15-inch punched format. Series 230 comes on a synthetic liner.

## PRODUCT CHARACTERISTICS

Property	Description
Thickness (film and adhesive)	3-4 mil
Film color	See color chart
Adhesive	Clear, pressure sensitive
Liner	Synthetic
Application substrates	For flat surfaces without rivets
Application surfaces	Flexible signage, glass, acrylic, polycarbonate
Removability	Permanent

## INTENDED APPLICATIONS

Series 230 is intended for making permanent, durable printed graphics using the GERBER EDGE®, GERBER EDGE 2®, and GERBER EDGE FX™ thermal transfer printing systems, in conjunction with GerberColor™ Foils. It is well suited for flat, internally illuminated sign faces and for first surface applications to 3M™ Panaflex 945™ substrate.

## PERFORMANCE LIFE – (UNPRINTED)

The exterior performance life of Gerber Series 230 is based upon field experience and exposure tests conducted throughout the United States. When the graphics are processed and used according to Gerber recommendations, they should have an expected performance life up to the values shown in the charts below. The actual performance depends on the following conditions:

- Selection and preparation of substrate
- Application methods
- Exposure conditions
- Cleaning methods

Application Specifics			Performance Life (years): Unprinted	
			U.S. <sup>1</sup>	S.W. <sup>2</sup>
*Vertical Exposure Series 230	Signs Only	Unprinted, applied to first surface	6	5

\*Face of graphic is vertical 90° ± 10°.

1. For exterior performance life statements outside of the United States, contact Gerber Technology.

2. The United States Desert Southwest area includes Arizona, New Mexico, and the desert areas of California, Nevada, Utah, and Texas.

## 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).

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

## PRINTING

Use Gerber Series 230 settings when printing with EDGE® Series thermal transfer printing systems. Gerber standard tack application tape is required to be used as the transfer carrier for all printed graphics.

Series 230 is compatible with GerberColor™ Process Pro™ (GCP), Spot (GCS), Transparent (GCT), Medal (GCM), and Finishing (GCF) Series Foils.

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, extremely durable 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%.

## CUTTING

EDGE graphics printed on Series 230 can be cut on any 15-inch EDGE-compatible sprocketed plotter. Non-printed graphics can be cut on friction cutters or the Gerber ODYSSEY™.

Excess film should be weeded within 24 hours of cutting to minimize the effect of adhesive flow.

## 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, 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.

Series 230 typically adheres to solar-grade polycarbonate substrates. However, some lots of this substrate may inhibit the adhesion of this film. Polycarbonate substrates may require drying by baking before use. Refer to the manufacturers' instructions.

Many paint systems (e.g. two-part urethane) and some plastic substrates will outgas if they are not fully cured. Out gassing can cause permanent bubbling in most films; substrates should be tested for out gassing prior to final application. Plastics should be dried at 150°F (66°C) for 24 hours prior to application to help avoid out gassing.

## APPLICATION TECHNIQUES

Both wet and dry application methods can be used with Series 230. Panels should be overlapped by 0.0625 inch (1/16 inch). Gerber standard tack application tape is recommended for all EDGE-printed applications.

## CHANNEL LETTERS

When using Series 230 on rigid plastic channel letter faces, avoid contact with the adhesive used to attach the trim cap edges. These adhesives attack Series 230 and cause curling, lifting and premature failure of the film.

## 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.

## PHYSICAL PROPERTIES

Property	English Units	Metric Units
Dimensional Stability	0.015 in	0.4 mm
Service temperature range	-50° to 170°F	-45° to 77°C
Tensile Strength	5 lb/in at 73°F	0.9 kg/cm at 23°C
Min. Application Temperature	60°F	16°C

## CHEMICAL RESISTANCE

Series 230 Translucent Film is resistant to mild acids, mild alkalis and salts. Material has excellent water resistance.

## RELATED LITERATURE

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

## CONTACT INFORMATION

For help with questions concerning Gerber products, please call your distributor or Gerber Customer Service at 1-800-222-7446 or (860) 644-1551. Visit us on the Internet at [www.gerbertechnology.com/signage](http://www.gerbertechnology.com/signage) to learn more about our many other foils, materials and equipment.

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.

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