

# PRODUCT CHARACTERISTIC SHEET and COC

## ***PLEASE READ BEFORE USING!***

**Material: CONVEX® Diamond™ with GearWrap adhesive.**

**Part Nos: CD141550 & CD143050**

**General Description:** Soft, flexible vinyl with a large Metallic flake and clear permanent acrylic adhesive. This vinyl is suited for thermal printing and solvent ink jet printing. Convex® and Pro-Shield™ Laminates are formulated for compatibility with Convex base materials such as Convex Diamond. Prolonged exposure to UV light can dull the metallic flake over time.

Thickness:	13-mil film with 1-mil. of GearWrap adhesive	<b>Adhesive Properties:</b> 1 mils. of permanent acrylic pressure sensitive adhesive formulated for painted helmets and high energy surfaces. For LSE plastics such as Lacrosse, Hockey, Ski, Bike, etc., use Convex Diamond for Lacrosse & Hockey. It contains a more aggressive adhesive.
Outdoor Life:	2 years	
Shelf Life:	2 year stored at 70° F & 50%RH	
Service Temperature Range:	(-40° F to 176° F)	
Minimum Application Temp.:	55° F	

### Tests performed | results:

Ultimate Peel from	Average OZ/IN	Test Method
Acrylic	76	ASTM D 903 (Modified for 72 hour dwell time)
Glass	75	
Polypropylene	16	
Stainless Steel	65	
<b>Expected Shear</b> Room Temp (hours)	75	ASTM D 3654 Method A a. 1 hrl dwell b. 1 sq. in. surface c. 4 lb. load
<b>Tack (gm/sq cm)</b>	310	ASTM D 2979

## CERTIFICATE OF CONFORMANCE (COC)

<b>Sold to:</b>		<b>Lot No.:</b>	
<b>Buyer:</b>		<b>PO#</b>	
<b>Supplier:</b>	Graphic Marking Systems	<b>Supplier's Authorized Rep.:</b>	<i>Demas Garcia</i>
<b>MFR Part No:</b>	Top of the page	<b>Title:</b>	Converting Manager
<b>MFR Date:</b>		<b>Ship Date:</b>	
		<b>Date:</b>	

### Recommended Application Techniques:

On curved surfaces, apply by rubbing from the center out or use a hinge method starting at the most raised part of the curved shape. Convex™ Diamond is more likely to leave adhesive residue if adhered for more than 1 year. Not recommended for low energy surfaces.

### GSP Software Settings:

In Gerber's Plot program, click on the "123" button, then click on the Substitute button and select vinyl type, "Imagecal-P, SD8, or 220 Premium" from the pull-down menu. If you have the Gerber enVision 375 Plotter/Cutter, go to Plotter settings "F7" and set the Speed to 50, Acceleration to 66, Sharp Corners to 66.67 or higher, and Force to 50% or more depending on the age of your blade. A 45 or 60 degree blade is recommended for all cutters cutting this material. If you are laminating on top of this material, use the same settings and determine the Force by performing test cuts. It may be necessary to make double or triple cuts.

**USE A 45° blade or 60° BLADE on any combination of material 8 mil or thicker.**

#### Disclaimer:

All of the descriptive information listed above is our recommendation only. This information does not suggest or constitute a written or verbal warranty or guaranty of any kind by the manufacturer or distributor of this product. Although this material can be printed on with some solvent based printers, the surface characteristics of the material can change from roll to roll, and failure of optimal printing results are not a basis for returning the product. Purchasers of this product shall be responsible for independently determining the suitability of the material for the intended application. GMS1218 Graphic Marking Systems

# Material Safety Data Sheet (MSDS)

<b>Material Name:</b> CONVEX® Diamond GearWrap		<b>Company:</b>	
<b>Part Nos:</b> CD141550 & CD143050		Graphic Marking Systems	
Date Prepared: 12/7/2018		Address: 28457 N. Ballard Rd., Suite A1	
<b>General Description:</b> Soft, flexible vinyl with a large Metallic flake and clear permanent acrylic adhesive.		Lake Forest, IL 60045	
		Phone: 847-582-9276	
		Fax: 847-582-9282	
<b>Composition and information on ingredients:</b>			<b>UL Recognized:</b> NO
Individual components of this product do not contribute to any known hazards.			<b>ROHS Compliant:</b> YES
OSHA HAZARDOUS COMPONENTS (29 CFR1910.1200): NONE			<b>REACH Compliant:</b> NO
<b>Hazards Identification:</b>			
POTENTIAL HEALTH EFFECTS: None			
ACUTE: No significant toxic hazard. When burned may produce toxic fumes.			
CHRONIC: No significant toxic hazard.			
None of the components present in this material at concentrations equal to or greater than 0.1% are listed by IARC, NTP, OSHA, or ACGIH as a carcinogen.			
<b>First Aid Measures:</b>		<b>Fire Fighting Measures:</b>	
Emergency and First Aid Procedures:		Flash Point: N/A	
<b>ROUTES OF ENTRY:</b>		Method Used: N/A	
Inhalation: N/A	Skin: N/A	Auto-ignition Temperature: N/A	
Eyes: N/A	Ingestion: N/A	Flamable limits in Air % by Volume: LEL: N/A, UEL: N/A	
<b>Accidental Release Measures:</b> N/A		Extinguishing Media: Multi-rated ABC extinguisher or water	
<b>Handling and Storage:</b>		Unusual Fire and Explosion Hazards: None	
No special handling required other than storing away from excessive heat sources.		<b>Special Fire Fighting Procedures:</b> In case of fire, use self-contained breathing apparatus and full protective equipment - all fires liberate toxic gases.	
<b>Exposure Controls and Personal Protection:</b>		<b>Physical and Chemical properties:</b>	
Respiratory Protection: None required	Vapor Pressure (mm Hg): N/A		
Skin Protection: No precautions required	Boiling Point: N/A		
Eye Protection: None required	Vapor Density (air = 1): N/A		
Exposure Guidelines: None established	Melting Point: N/A		
Engineering Controls: None required	Appearance and odor: N/A		
<b>Toxicological Information:</b>		Reactivity of water: N/A	
Carcinogen Status: NTP: NONE IARC: NONE OSHA: NONE		Specific Gravity (H 0=1): N/A	
<b>Ecological Information:</b> No Data Available		<b>Stability and Reactivity:</b>	
<b>Transport Information:</b>		Stability: N/A	
TRANSPORTATION AND HAZARDOUS MATERIALS DESCRIPTION: Not a hazardous material for DOT shipping.		Conditions to avoid: Fire or Excessive Heat	
<b>Disposal Considerations:</b> Waste Disposal:		Incompatibility: None	
Dispose of in accordance with Local, State and Federal regulations.		Hazardous Decomposition Products: None	
<b>Other Information:</b>		Hazardous Polymerization: Will not occur.	
The information contained herein is based on the data available to Graphic Marking Systems, and is believed to be correct. However, Graphic Marking Systems makes no warranty, expressed or implied, regarding the accuracy of these data or the results to be obtained from the use thereof. Graphic Marking Systems assumes no responsibility for injury from the use of the product described herein.		<b>Regulatory Information:</b>	
		<b>OSHA STANDARD CFR 29, PART 1910.1200:</b> This product is considered to be an "article" under this standard.	
		<b>SARA 313 INFORMATION:</b> This product contains no substances at or above the reporting threshold subject to the reporting requirement of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 371, based on available data.	
		<b>CALIFORNIA PROPOSITION 65:</b> The following statement is made in order to comply with the California Safe Drinking Water and Toxic Enforcement Act of 1986. <b>Warning</b> this product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. This product contains up to 0.23% Toluene in the adhesive.	