

# PRODUCT CHARACTERISTIC SHEET and COC

## **PLEASE READ BEFORE USING!**

**Material: CONVEX® 4 mil. Laminate**

**Part Nos: C41350C, C42450C, C42750C, C43050C, C44850C, C45450C.**

**General Description:** Clear soft flexible vinyl with a clear permanent acrylic adhesive. Used for over-laminating when conformability is necessary. Different combinations of Convex® base materials and Convex® laminate can be used to achieve a variety of decal thicknesses and selling prices.

Thickness:	4 mil. vinyl with 1 mil of adhesive	<b>Adhesive Properties:</b> General purpose permanent acrylic pressure sensitive adhesive works on most surfaces. Not recommended for low energy plastics.
Outdoor Life:	2 years	
Shelf Life:	2 years stored at 70 F & 50%RH	
Service Temperature Range:	(-40° F to 176° F)	
Minimum Application Temp.:	50° F	

### Tests performed | results:

Ultimate Peel from	Average OZ/IN	Test Method
Acrylic	66	ASTM D 903 (Modified for 72 hour dwell time)
Painted Polycarbonate	45	
Polycarbonate	52	
Glass	63	
Stainless Steel	53	
Polypropylene	13	
<b>Expected Shear</b> Room Temp (hours)	15	ASTM D 3654 Method A a. 1 hrl dwell b. 1 sq. in. surface c. 4 lb. load
<b>Tack</b> (gm/sq cm)	240	ASTM D 2979

## CERTIFICATE OF CONFORMANCE (COC)

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

### Recommended Application Techniques:

On curved surfaces such as helmets, apply by rubbing from the center out. When using Convex® as a Laminate, as it is separated from the liner, if there is too much drag tension applied to the supply roll, it can stretch and curl up immediately after it is cut on a plotter. Laminate with a cold pressure sensitive laminator or by hand.

### GSP Software Settings:

Please do test cuts to determine the best cutter settings for the finished base materials and laminate construction.

**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. GMS0718 Graphic Marking Systems

# Material Safety Data Sheet (MSDS)

<b>Material Name:</b> CONVEX® 4 mil. Laminate		<b>Company:</b>	
<b>Part Nos:</b> C41350C, C42450C, C42750C, C43050C, C44850C, C45450C.		Graphic Marking Systems	
Date Prepared: 7/5/2018		Address: 28457 N. Ballard Rd., Suite A1 Lake Forest, IL 60045	
<b>General Description:</b> Clear soft flexible vinyl with a clear permanent acrylic adhesive.		Phone: 847-582-9276 Fax: 847-582-9282	
<b>Composition and information on ingredients:</b>		<b>UL Recognized:</b>	<b>NO</b>
Individual components of this product do not contribute to any known hazards.		<b>ROHS Compliant:</b>	<b>YES</b>
OSHA HAZARDOUS COMPONENTS (29 CFR1910.1200): NONE		<b>REACH Compliant:</b>	<b>YES</b>
<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      Boiling Point: N/A	
Skin Protection: No precautions required		Vapor Density (air = 1): N/A      Melting Point: N/A	
Eye Protection: None required		Appearance and odor: N/A      Reactivity of water: N/A	
Exposure Guidelines: None established		Specific Gravity (H 0=1): N/A      Solubility in water: N/A	
Engineering Controls: None required		<b>Stability and Reactivity:</b>	
<b>Toxicological Information:</b>		Stability: N/A	
Carcinogen Status: NTP: NONE    IARC: NONE    OSHA: NONE		Conditions to avoid: Fire or Excessive Heat	
<b>Ecological Information:</b> No Data Available		Incompatibility: None	
<b>Transport Information:</b>		Hazardous Decomposition Products: None	
TRANSPORTATION AND HAZARDOUS MATERIALS DESCRIPTION: Not a hazardous material for DOT shipping.		Hazardous Polymerization: Will not occur.	
<b>Disposal Considerations:</b> Waste Disposal:		<b>Regulatory Information:</b>	
Dispose of in accordance with Local, State and Federal regulations.		<b>OSHA STANDARD CFR 29, PART 1910.1200:</b> This product is considered to be an "article" under this standard.	
<b>Other Information:</b>		<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.	
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>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 0.01% Toluene in the adhesive.	