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
Outdoor Life: 2 years
Shelf Life: 2 years stored at 70 F & 50%RH
Service Temperature Range: (-40º F to 176º F)
Minimum Application Temp.: 50º F

Adhesive Properties:
General purpose permanent acrylic pressure sensitive adhesive works on most surfaces. Not recommended for low energy plastics.

Tests performed | results:

<table>
<thead>
<tr>
<th>Ultimate Peel from</th>
<th>Average OZ/IN</th>
<th>Test Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acrylic</td>
<td>66</td>
<td>ASTM D 903 (Modified for 72 hour dwell time)</td>
</tr>
<tr>
<td>Painted Polycarbonate</td>
<td>45</td>
<td></td>
</tr>
<tr>
<td>Polycarbonate</td>
<td>52</td>
<td></td>
</tr>
<tr>
<td>Glass</td>
<td>63</td>
<td></td>
</tr>
<tr>
<td>Stainless Steel</td>
<td>53</td>
<td></td>
</tr>
<tr>
<td>Polypropylene</td>
<td>13</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Expected Shear</th>
<th>Room Temp (hours)</th>
<th>Test Method</th>
<th>a. 1 hrl dwell</th>
<th>b. 1 sq. in. surface</th>
<th>c. 4 lb. load</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tack (gm/sq cm)</td>
<td>240</td>
<td>ASTM D 2979</td>
<td>15</td>
<td>2 years</td>
<td></td>
</tr>
</tbody>
</table>

CERTIFICATE OF CONFORMANCE (COC)

Sold to: 
Buyer: 
PO#: 
Supplier: Graphic Marking Systems 
Supplier's Authorized Rep.: Demas Garcia
MFR Part No: Top of the page 
Title: Converting Manager 
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 45º blade or 60º 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)

**Material Name:** CONVEX® 4 mil. Laminate  
**Part Nos:** C41350C, C42450C, C42750C, C43050C, C44850C, C45450C.  
**Date Prepared:** 7/5/2018  
**Company:** Graphic Marking Systems  
**Address:** 28457 N. Ballard Rd., Suite A1  
**Lake Forest, IL 60045**  
**Phone:** 847-582-9276  
**Fax:** 847-582-9282

**General Description:** Clear soft flexible vinyl with a clear permanent acrylic adhesive.

**Composition and information on ingredients:**  
Individual components of this product do not contribute to any known hazards.

**OSHA HAZARDOUS COMPONENTS (29 CFR1910.1200): NONE**

## Hazards Identification:

- **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.

## First Aid Measures:

**Emergency and First Aid Procedures:**

**ROUTINES OF ENTRY:**

- Inhalation: N/A  
- Skin: N/A  
- Eyes: N/A  
- Ingestion: N/A

**Accidental Release Measures:** N/A

**Handling and Storage:**

No special handling required other than storing away from excessive heat sources.

**Exposure Controls and Personal Protection:**

- **Respiratory Protection:** None required  
- **Skin Protection:** No precautions required  
- **Eye Protection:** None required  
- **Exposure Guidelines:** None established  
- **Engineering Controls:** None required

**Toxicological Information:**

- **Carcinogen Status:** NTP: NONE  
- **IARC:** NONE  
- **OSHA:** NONE

**Ecological Information:** No Data Available

**Transport Information:**

- **TRANSPORTATION AND HAZARDOUS MATERIALS DESCRIPTION:** Not a hazardous material for DOT shipping.

**Disposal Considerations:** Waste Disposal: Dispose of in accordance with Local, State and Federal regulations.

**Other Information:** 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.

**Physical and Chemical properties:**

- **Vapor Pressure (mm Hg):** N/A  
- **Boiling Point:** N/A  
- **Vapor Density (air = 1):** N/A  
- **Melting Point:** N/A  
- **Appearance and odor:** N/A  
- **Reactivity of water:** N/A  
- **Specific Gravity (H 0=1):** N/A  
- **Solubility in water:** N/A

**Stability and Reactivity:**

- **Stability:** N/A  
- **Conditions to avoid:** Fire or Excessive Heat  
- **Incompatibility:** None  
- **Hazardous Decomposition Products:** None  
- **Hazardous Polymerization:** Will not occur.

**Regulatory Information:**

- **OSHA STANDARD CFR 29, PART 1910.1200:** This product is considered to be an "article" under this standard.

- **SARA 313 INFORMATION:** 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.

- **CALIFORNIA PROPOSITION 65:** The following statement is made in order to comply with the California Safe Drinking Water and Toxic Enforcement Act of 1986. **Warning** 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.