

PRODUCT CHARACTERISTIC SHEET and COC

PLEASE READ BEFORE USING!

Material: PRO-SHIELD12™ mil.

Part Nos: PS12XX50C (part no. where "XX" stands for the width of the roll.)

General Description: Flexible heavy duty clear vinyl with clear permanent acrylic adhesive. Different combinations of base materials and PRO-SHIELD™ can be used to achieve a variety of decal thicknesses and prices.

Thickness: 12-mil vinyl with 1.5 mil.

Outdoor Life: UV is 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

Adhesive Properties:

1.5 mils. of permanent acrylic pressure sensitive adhesive works for most smooth surfaces.

Tests performed | results:

Ultimate Peel from	Average OZ/IN	Average N/25mm	Test Method
Acrylic	104	28.9	ASTM D 903 (Modified for 72 hour dwell time)
Glass	74	20.6	
Polypropylene	21	5.8	
Stainless Steel	70	19.5	
Expected Shear Room Temp (hours)	10	ASTM D 3654 Method A	
		a. 1 hrl dwell b. 1 sq. in. surface c. 4 lb. load	
Tack (gm/sq cm)	300	ASTM D 2979	

CERTIFICATE OF CONFORMANCE (COC)

Sold to:		Lot No.:	3508
Buyer:		PO#	
Supplier:	Graphic Marking Systems	MFR Part No:	Top of the page
MFR Date:		Ship Date:	
		Title:	Converting Manager
		Date:	

Recommended Application Techniques:

On curved surfaces such as helmets, apply by rubbing from the center out. Convex® brand base materials are recommended in combination with PRO-SHIELD™. Apply with cold laminator or by hand. When Convex® Laminate is separated from the liner it is unsupported and can stretch during the laminating process. If there is too much reverse tension applied on the supply roll it will stretch and curl up immediately when it is cut. Laminate with a cold pressure sensitive laminator or by hand.

RIP Software Settings:

If you have the Gerber enVision 375 Plotter/Cutter, determine the Force by performing test cuts. Or go to Plotter settings "F7" and set the Speed to 50, Acceleration to 50, Sharp Corners to 80 or higher, and Force to 75% or more depending on the age of your blade. A 45 or 60 degree blade is recommended for all cutters cutting this material. Depending on the base material, it may be necessary to make double cuts by "cutting and pasting back" the cut lines in your design program. If you do not have enVision series Gerber cutter, you will have to determine the settings by test cutting the material. If you are using Mac Imprint™, please perform test 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. GMS0612 Graphic Marking Systems

Material Safety Data Sheet (MSDS)

Material Name: PRO-SHIELD12™ mil.		Company:	
Part Nos: PS12XX50C (where “XX” stands for the width of the roll.)		Graphic Marking Systems	
Date Prepared: 9/28/2011		Address: 28457 N. Ballard Rd., Suite A1 Lake Forest, IL 60045	
General Description: Flexible heavy duty clear vinyl with clear permanent acrylic adhesive.		Phone: 847-582-9276 Fax: 847-582-9282	
Composition and information on ingredients: Individual components of this product do not contribute to any known hazards. OSHA HAZARDOUS COMPONENTS (29 CFR1910.1200): NONE		UL Recognized:	NO
		ROHS Compliant:	YES
		REACH Compliant:	NO
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:		Fire Fighting Measures:	
Emergency and First Aid Procedures:		Flash Point: N/A	
ROUTES OF ENTRY:		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	
Accidental Release Measures: N/A		Extinguishing Media: Multi-rated ABC extinguisher or water	
Handling and Storage:		Unusual Fire and Explosion Hazards: None	
No special handling required other than storing away from excessive heat sources.		Special Fire Fighting Procedures: In case of fire, use self-contained breathing apparatus and full protective equipment - all fires liberate toxic gases.	
Exposure Controls and Personal Protection:		Physical and Chemical properties:	
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		Stability and Reactivity:	
Toxicological Information:		Stability: N/A	
Carcinogen Status: NTP: NONE IARC: NONE OSHA: NONE		Conditions to avoid: Fire or Excessive Heat	
Ecological Information: No Data Availble		Incompatibility: None	
Transport Information:		Hazardous Decomposition Products: None	
TRANSPORTATION AND HAZARDOUS MATERIALS DESCRIPTION: Not a hazardous material for DOT shipping.		Hazardous Polymerization: Will not occur.	
Disposal Considerations: Waste Disposal: Dispose of in accordance with Local, State and Federal regulations.		Regulatory Information:	
Other Information:		OSHA STANDARD CFR 29, PART 1910.1200: This product is considered to be an "article" under this standard.	
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.		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: CALIFORNIA PROPOSITION 65: 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 a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.	