PRODUCT CHARACTERISTIC SHEET and COC

PLEASE READ BEFORE USING!

Material: Pitbull™ Digital Print Vinyl

Part Nos: PB51550W, PB52050W, PB53050W, PB55450W

General Description: White, soft, flexible vinyl with a clear extremely aggressive permanent adhesive suited for hard-to-stick-to surfaces including Thermoplastic Olefin. This vinyl is suited for solvent ink jet printing and thermal printing. Different combinations of Convex[™] or Pro-Shield[™] laminates can be used to achieve a variety of decal thicknesses.

Thickness:	3 mil vinyl with 2 mil. of adhesive.		
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		

Adhesive Properties:

2 mils. of permanent acrylic pressure sensitive adhesive works for most surfaces including textured low energy plastic and metal surfaces

Tests performed | results:

Ulitmate Peel from	Average OZ/IN	Test Method	
Acrylic	108	ASTM D 903 (Modified for 72 hour dwell	time)
Glass	106		
Polypropylene	71		
Stainless Steel	113		
Expected Shear	40	ASTM D 3654 Method A	a. 1 hrl dwell
Room Temp (hours)		ACTIVID GGGT MIGRIOUT	b. 1 sq. in. surface
			c. 4 lb. load
Tack (gm/sq cm)	1200	ASTM D 2979	C. 4 ID. IOAG

CERTIFICATE OF CONFORMANCE (COC)

Sold to:	Lot No.:				
Buyer:		PO#	Supplier's Authorized Rep.:		
Supplier:	Graphic Marking Systems	MFR Part No:	Top of the page	Title:	
MFR Date:		Ship Date:		Date:	

Recommended Application Techniques:

Pitbull is ideal for LSE applications such as pelican cases and motorsport vehicles. When applying to curved smooth surfaces such as MX bike plastics, clean the plastic with alcohol or acetone to remove any "silicone" mould residue from the plastic. Due to the aggres-siveness of the adhesive, wet application techniques may be preferred. If you are laminating with Pro-Shield™ laminate, use the aid of a heat gun to get the finished graphic to conform to complex curved shapes. Pitbull vinyl may not remove cleanly from surfaces.

GSP Software Settings:

5 mil. In Gerber's Plot program, click on the "123" button then on the substitute button and select vinyl. Select 3M 220 Premium or Gerber ImageCal from the pull-down menu as the vinyl to print on. If you are using laminates on top of the base material, you will have to determine the best cutter settings by test cutting the finished construction.

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

Disclaime

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: Pitbull™ Digital Print Vinyl Company:

PB51550W, PB52050W, PB53050W, PB55450W Part Nos:

Date Prepared: 9/28/2011 Address: 28457 N. Ballard Rd., Suite A1

Lake Forest, IL 60045

Graphic Marking Systems

Phone: 847-582-9276 Fax: 847-582-9282

General Description: White, soft, flexible vinyl with a clear extremely aggressive permanent

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

UL Recognized: NO **ROHS Compliant:** YES **REACH Compliant:** YES

N/A

N/A

N/A

N/A

Hazards Identification:

POTENTIAL HEALTH EFFECTS:

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:

ROUTES OF ENTRY:

N/A Inhalation: N/A Skin: Eves: 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.

Fire Fighting Measures:

Flash Point: N/A N/A Method Used: N/A Auto-ignition Temperature

Flamable limits in Air % by Volume: LEL: N/A, UEL: N/A

Extinguishing Media: Multi-rated ABC extinguisher or water

Unusual Fire and Explosion Hazards: None

Physical and Chemical properties:

Vapor Pressure (mm Hg)

Vapor Density (air = 1):

Appearance and odor:

Specific Gravity (H 0=1) Stability and Reactivity:

Stability:

Special Fire Fighting Procedures: In case of fire, use self-contained breathing apparatus and full protective equipment - all fires liberate toxic gases.

N/A

N/A

N/A

N/A

Boiling Point:

Melting Point:

Fire or Excessive Heat

Reactivity of water:

Solubility in water:

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 Avaiable

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.

Regulatory Information:

Conditions to avoid:

Incompatibility:

OSHA STANDARD CFR 29, PART 1910.1200: This product is considered to be an

N/A

None

None

Will not occur.

"article" under this standard.

Hazardous Polymerization:

Hazardous Decomposition Products:

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.

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: 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.