

**PRODUCT CHARACTERISTIC SHEET and COC****PLEASE READ BEFORE USING!****Material: 3M 3690****Part Nos: 3M36901550W**

**General Description:** White film with an aggressive permanent gray adhesive. This product can be used for exterior applications that encounter severe weather conditions along with an adhesive that adheres to sand cast and moderately rough, as well as low surface energy surfaces. The gray adhesive also provides opacity to cover over existing graphics Etc...

Thickness:	2 mil. vinyl with 1.5 mil of adhesive
Outdoor Life:	5 years
Shelf Life:	2 years stored at 70° F & 50%RH
Service Temperature Range:	(-65° F to 225° F) (-54°C to 107°C)
Minimum Application Temp.:	(-40° to 90°F) (-54° to +107°C)

**Adhesive Properties:**

an aggressive permanent gray adhesive. The gray adhesive also provides opacity to cover over existing graphics

**Tests performed | results:**

Ultimate Peel from	Average lb/in	Test Method
Acrylic	5	
Aluminum	6	
Chrome	5	
Fiberglass	5	
Powder Coat Paint	3-6	
<b>Expected Shear</b> at 73°F	5	
<b>Tack (gm/sq cm)</b>	N/A	

**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>	
<b>MFR Date:</b>		<b>Top of the page</b>	<b>Title:</b>
			<b>Converting Manager</b>
<b>Ship Date:</b>		<b>Date:</b>	

**Recommended Application Techniques:**

Use a dry application method. Do not use a detergent and water or a commercial application liquid to position the graphic.  
Removal: This film is not removable. A solvent-based remover system maybe needed.

**GSP Software Settings:**

For the best printing results from the Gerber EDGE®, select the settings for "Security label stock" or LexEdge®II. Cutter settings should be determined by performing test cuts.  
More information and specifications can be obtained by visiting 3M on the web at: www.3M.com.

**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)

<b>Material Name: 3M 3690</b>				<b>Company:</b>  Graphic Marking Systems  Address: 28457 N. Ballard Rd., Suite A1 Lake Forest, IL 60045  Phone: 847-582-9276 Fax: 847-582-9282						
<b>Part Nos: 3M36901550W</b>										
Date Prepared: 4/12/2013										
<b>General Description:</b> White film with an aggressive permanent gray adhesive.										
<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 Availble					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: Dispose of in accordance with Local, State and Federal regulations.					<b>Regulatory Information:</b>					
<b>Other Information:</b>					<b>OSHA STANDARD CFR 29, PART 1910.1200:</b> 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.					<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> 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.					