

DTAA050

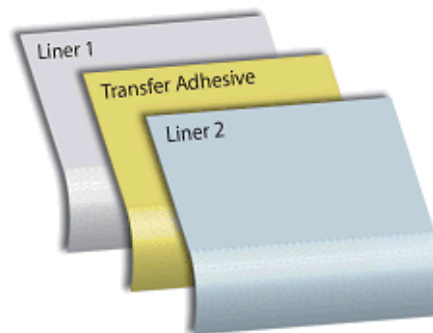
Die Cut Adhesive Range

Technical Specifications

Product Description

DTAA050 is a hybrid rubber / acrylic transfer adhesive designed to give excellent adhesion to metals , treated soft touch PU paints and low surface energy substrates. DTAA050 is resilient to many common reagents and is particularly useful for high shear and high temperature applications .The 50 micron adhesive gives additional tack and rapid adhesion in critical applications .

Product Construction



Component	Description	Thickness (nominal value)	
Liner	Glassine	75 micron (μ)	(3.0 mil)
Adhesive	Hybrid Rubber Acrylic Permanent	50 micron (μ)	(2.0 mil)
Liner 2	Polyester	36 micron (μ)	(1.4 mil)

Product Applications

DTAA050 will give excellent adhesion to treated soft touch painted surfaces typically used in electronic devices. It is particularly suitable for adhering customised logos to substrates such as :

- laptop covers
- reader bezels
- tablet surfaces

Typical Test Conditions

DTAA050 has been tested according to the following industry standards and relevant customer test specifications.

Test Type	Test Method	Test Specification
Standard Atmosphere	FTM 1	25°C & 50% RH for 20 minutes, 24 hours with additional testing up to 2 weeks.
High Temperature Test	FTM 1	70°C for 72 hours
High Temperature and Humidity Test	FTM 1	70°C & 100% RH for 72 hours
Water Immersion	FTM 1	25°C & 50% RH for 48 hours
Low Temperature Test	FTM 1	-40°C for 72 hours
SAFT Shear	FTM 8	1kg, 25mm x 25mm sample area, Temperature gradient = 50°C - 195°C @ 100°C / hour
Static Shear	FTM 8	1kg, 25mm x 25mm sample area, 25°C
Liner Release Test	FTM 3	50mm width, 300mm / min
Loop Tack	FTM 9	25mm x 25mm / Glass
Temperature Resistance Long and Short Term	No Shear Load. Horizontal Plate	200°C for 24 hours 100°C for 72 hours

Typical Test Substrates

DTAA050 has been tested using a range of different types of surfaces. These are listed in the table below:

Test Substrates	Type
Metal Surfaces	Aluminium, Stainless Steel
High Energy Plastic Surfaces	Polycarbonate, PMMA, ABS
Low Energy Plastic Surfaces	PP

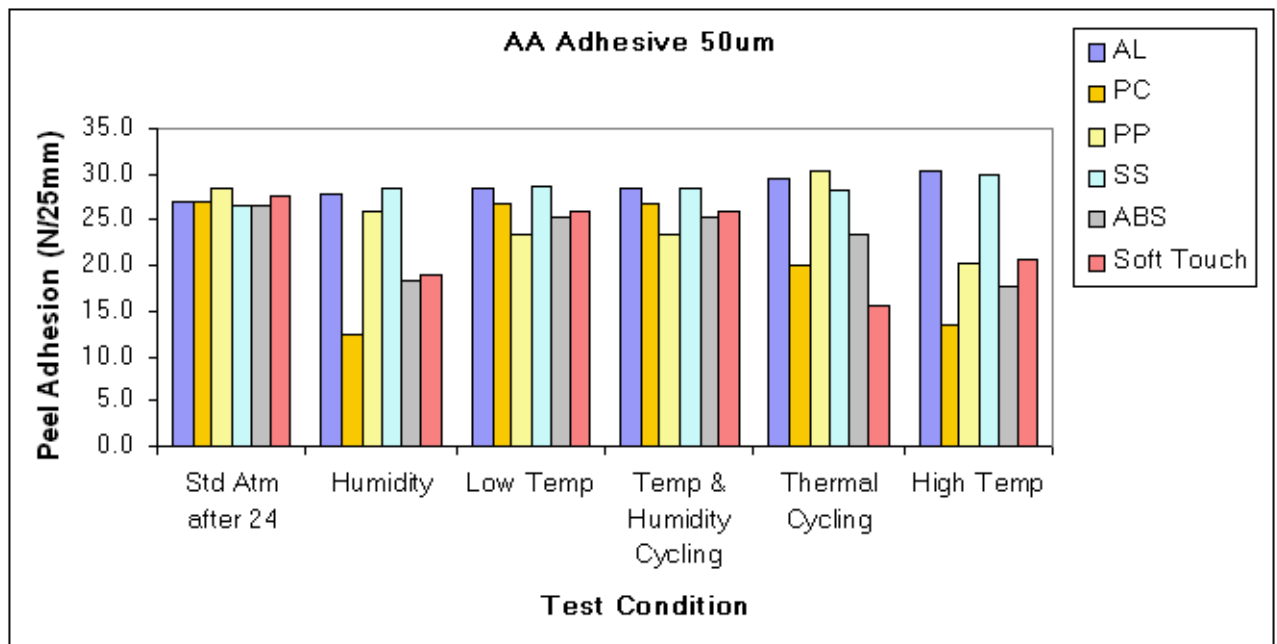
Die Cut Process

DTAA050 is proven for use in multi-tool rotary die cut processes where handling, initial tack and adhesion performance are all critical.

Worldmark tapes have been used successfully in the manufacture of a wide variety of die cut parts for electronics industry and uses such as:

- Gaskets
- Lens Mounts
- Spacers
- Shock Absorbers
- Protective Covers

**Adhesive Performance AA @ 50um Hybrid Rubber Acrylic Adhesive
Typical Properties**



Std Atm After 24	: 24 hours at standard atmosphere
High Temp / Humidity	: 1 week 80°C & 100% RH
Low Temp	: 72 hours at -40°C
High Temp / Humidity Cycling	: 85C 85% RH, -40C for 2 hours ramps, 12 cycles
Thermal Cycling	: -40C to 85C for 1 hour / cycle, 40 cycles
High Temp	: 72 hours at 80°C

Temperature Range

Recommended Range -40°C (-40°F) to 200°C (392°F).

Product Application	The application surface should be clean and dry. In order to optimise performance, surface temperatures should be around room temperature.
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Storage Conditions	DTAA050 label material and labels manufactured from this material should be kept in plastic bags and stored at room temperature conditions (approx 23C and 50% RH)
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Shelf Life	If stored under recommended conditions, then this material will retain it's specified performance criteria for 2 years.
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ROHS Compliance	This material meets European (EU) Directive 2002/95/EC on the restriction of the use of certain hazardous substances (RoHS) in electrical and electronic equipment. Worldmark can clearly state that our products do not contain halogens and heavy metals etc in excess of the maximum concentrations stipulated..
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NOTE: Product compliance is based upon information provided by independent laboratory testing of our products. Worldmark makes no independent representations or a warranty express or implied and assumes no liability in connection with use of this information

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