

Typical Physical Properties

Note: The following technical information and data should be considered representative or typical only and should not be used for specification purposes.

Peel	N/A	Label material Destruits
Loop Tack	N/A	Label material Destruits
Shear	N/A	Label material Destruits
Adhesive Coat Weight	1.08 to 1.62 g/100 in. ²	TM-2279
Release Range product 7613	25 grams/inch width	TLMI Method, 180° removal, 90 in./min.
Service Temperature	-40°F to 300°F (-40°C to 149°C) See Environmental Section	
Minimum Application Temperature	50°F (10°C)	
Convertability	In order to capture the superior performance properties of High Holding Acrylic Adhesive 350, thicker calipers are utilized for LSE or textured substrates. Its higher caliper, while desirable for the end use applications, may require extra care during processing. Please refer to the die cutting/converting section of this data page or the "Guide to Converting and Handling Label Products" technical bulletin for additional information.	

Typical Peel Adhesion Properties

Note: The following technical information and data should be considered representative or typical only and should not be used for specification purposes.

Adhesion: ASTM D-3330 (modified): 90° peel, 12 inches/minute (305 mm/min).

	15 min. dwell Room Temperature		72 hr. dwell Room Temperature		72 hr. dwell 158°F (70°C)	
	oz/in	N/100mm	oz/in	N/100mm	oz/in	N/100mm
Stainless Steel	•		•		•	
Glass	•		•		•	
ABS (acrylonitrile butadiene styrene)	•		•		•	
Polycarbonate	•		•		•	
Polypropylene	•		•		•	
HDPE (high density polyethylene)	•		•		•	

*Not applicable. Label stock breaks when peeled.

No values recorded as facstock destructs / breaks when peeled.

Environmental Performance

Note: The following tests are intended as a guide to product performance. Application testing is recommended using actual substrates, expected dwell times, and actual conditioning for best determination of product suitability.

Labels were applied to stainless steel and dwelled 24 hours at room temperature before conditioning. Results were considered acceptable if no significant loss of adhesion occurred and label stock destructed when peeled from the surface.

Chemical Resistance: Bond is secure when exposed to the following:

- Auto Oil: 72 hours at 120°F (49°C).
- Weak Alkali: 4 hours at room temperature.
- Weak Acid: 4 hours at room temperature.
- NaCL Solution: 72 hours at room temperature.
- Gasoline & MEK: Not recommended for use with MEK (methyl ethyl ketone) or prolonged immersion in gasoline. Whenever exposure to specific solvents is an important consideration, testing is recommended to assure adequate performance.

Water Resistance: Withstands exposure to water at room temperature for 100 hours.

Humidity Resistance: Withstands exposure to 90°F (32°C) and 90% RH for 168 hours.

Application Techniques

Determining Suitability	The tamper-indicating mechanism (i.e. the facestock destruction) depends upon adequate adhesion of the label to the substrate. A sufficient bond may not develop on all surfaces due to low surface energy (e.g. Teflon), contaminated or textured surfaces. Therefore, it is important to determine the suitability of the product in the intended application by carefully pre-testing.
Dispensing	Care should be taken not to disturb or knick the facestock when manually removing the label from the liner. Slowly remove the liner from the label at a 90° angle.
Surface Preparation	Assume all surfaces to which these label materials will be applied are contaminated – metals may be oily or dusty, plastics may be coated with mold release agents, dirt, etc. Any surface contaminant will adversely affect adhesion and the ability to destruct: therefore, contaminants must be removed prior to application by wiping with a solvent such as isopropyl alcohol. Consult the manufacturer’s Material Safety Data Sheet for proper handling and storage of solvents.
Application Pressure	Application, temperature, pressure, and dwell time are all important variables to product adequate adhesion and assure the label fractures when removal or tampering is attempted. For best results, the label should be applied when all materials are over 50°F (10°C). Higher initial bonds can be achieved through increased application pressure (firm hand or squeegee pressure should be sufficient). The bond will increase in time, depending on the substrate. Metals and high surface energy materials will develop bonds faster than low surface energy materials.

Application Techniques (continued)	<p>Minimum Dwell Time For best results, wait 24 hours (at room temperature) before subjecting to harsh environments.</p> <p>Note: Our tamper-indicating product line is designed to indicate tampering by destructing when an attempt is made to remove the label. Since no tamper indicating feature is 100% tamper proof, careful consideration must be taken when designing labels or seals. When the consequences of tampering could be severe, such as injury or loss of human life or significant monetary loss, these products are not recommended as the sole means of package or product tamper indication. In these instances, additional methods of combination with the labels should be considered so that the tamper-indicating features are commensurate with the requirements of the application.</p>
Printing	<p>The topcoated print surface makes this product ideal for high quality graphics.</p> <ul style="list-style-type: none"> - Armor* Ax R7+ - Dai Nippon* R-300 - Dynic* HL-32 - Iimac* SP 330 - ITW * B-324 - Ricoh* B-110A, B-110C, B-110CX - Sony* TR6070, TR6075, 4070, TRX55, Signature Series Resin - Zebra* 5095 <p>*Not recommended for dot matrix / impact, ink jet, or laser printing.</p>
Die Cutting / Converting	<p>Die-cutting: Due to the fragile nature of the facestock, special handling (wider label matrix and wider edge trim to aid matrix stripping) should be considered when designing and processing fragile labels. For specific tips, see the IATD Technical Bulletin "Die-cutting Fragile Label Stocks."</p> <p>Dispensing: The combination of the fragile facestock and aggressive adhesive may present some difficulties in automatic dispensing. Testing with the intended application equipment and actual product samples are recommended before use.</p>
Packaging	<p>Finished labels should be stored in plastic bags.</p>
Storage	<p>Store at room temperature conditions of 72°F (22°C) and 50% relative humidity.</p>
Shelf Life	<p>If stored under proper conditions, product retains its performance and properties for two years from date of manufacture.</p>

Product Use

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