

5409 Hamlet Dr | Findlay, OH 45840 | 815 477 0778 | 815 477 1210 Fax | inoplas.com | info@inoplas.com

## **IPI UV Test Specifications**

All IPI materials marketed as *UV stable* | *Outdoor weatherable* have been tested and passed through the testing methodology below:

**Standard Cycle:** (72Wm2 @420nm/ 35oC): Step1 light only, Step 2 light+Spray **Filter:** Daylight **Bulbs:** X-1800 Xenon Arc Lamp- 1800W

The testing begins and alternates 'Steps' (defined in cycle above) each hour for one 'cycle' of 100 hours.

- At the end of each cycle, the samples are evaluated.
- Three cycles are performed (Total of 300 hours).
- Samples are evaluated and data is collected between each cycle.

**UV (Ultraviolet) Stability**: The ability of the engraving material to maintain its **colorfastness** in UV conditions for a limited period of time. This is separate from physical weathering. Although colorfastness is a desirable condition, no man-made product will remain colorfast in an exterior environment indefinitely. IPI materials are manufactured with UV stable plastic resins and films in many of its products to prolong the useful life of the material when used in reasonable exterior conditions. *Most IPI products will remain colorfast for 2+ years* (the following exceptions apply - 5 years for ADA Substrates & Appliqué, LaserTuff, LaserTuffTex, .005 Advantage Crystals *for Reverse Engraving*, and .005 Advantage Exterior Series *for Front Engraving* when properly mounted in exterior conditions. For signage, the use of an overcoat or protective acrylic clear sheet will increase the outdoor durability of these outdoor weatherable, UV-stable IPI sheet products. Sheltered environments also add significantly to the useful life.

**Outdoor Weatherable**: Often confused with UV stability, outdoor weatherability is the ability of plastic engraving material to withstand *exterior weathering conditions. (ie: rain, wind, snow etc.)* IPI products designated as "outdoor weatherable" are designed to *withstand average conditions and temperatures for up to 2 years* (the following exceptions apply - 5 years for ADA Substrate & Appliqué, LaserTuff, LaserTuffTex, .005 Advantage Crystals *for Reverse Engraving*, and .005 Advantage Exterior Series *for Front Engraving*, without significant degradation. Although no specific life can be designated to any product, IPI recognizes that under reasonable/normal weather conditions the material will not break down physically. Materials may become brittle and some discoloration or fading will occur when used in harsher environments or exposed for extended periods of time.

## **Terms and Conditions**

IPI's warranty is limited to replacement of product only, and such warranty does not extend to the costs of any repeat labor or incidental costs.

LIMITED WARRANTY, WARRANTY DISCLAIMERS AND LIMITATIONS OF REMEDIES AND LIABILITIES: Except as set forth above, Seller makes NO OTHER WARRANTIES concerning the products whatsoever. SELLER DISCLAIMS AND EXCLUDES ALL OTHER EXPRESS WARRANTIES AND ALL IMPLIED WARRANTIES, INCLUDING WITHOUT LIMITATION THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE concerning the products. In no event will Seller's liability exceed the paid purchase price of the products. Seller's obligations described in this paragraph shall be Buyer's sole and exclusive remedy against Seller and Seller's Distributors for any liability with respect to the products whether any claim for recovery is based upon or arises out of theories of contract, negligence, tort (including strict liability) or otherwise. Buyer agrees that NO OTHER REMEDY SHALL BE AVAILABLE to Buyer and that IN NO EVENT SHALL SELLER BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES, including without limitation loss of income, loss of time, loss of sales, cost of replacement items, or claims asserted by Buyer's customers. A suit based on any cause of action must be commenced within one year from the date of delivery of product.

Note: The above information is provided in good faith, however no warranty, express or implied, is given.