



**IUID Metal Nameplates** 

PHOTO ANODIZED PRODUCT LINE

Our Photo Anodized Aluminum IUID Plates provide excellent durability and barcode readability, making them the ideal choice for a wide range of outdoor and industrial applications. Metalphoto® anodized aluminum IUID plates provide excellent durability and barcode readability, making them the ideal choice for a wide range of Item Unique Identification (IUID) applications. For flexible photo-anodized aluminum labels, black text and barcodes are reproduced on a matte surface, ensuring good printability and accurate scan reads.

### **Material and Design Specifications**

- Metal .008" thick matte anodized aluminum is standard. Foil - .003" thick matte anodized aluminum is standard.
- Optional thicknesses include .012" (0.31 mm), .020" (0.51 mm), .032" (0.82 mm) and .063" (1.61 mm) thick matte anodized aluminum for metal and .005" (0.13 mm) thick matte anodized aluminum for foil.
- Standard adhesive: 0.0035" (0.089mm) pressure sensitive adhesive with a very high peel strength and excellent resistance to heat and chemicals.
- Pressure-sensitive adhesive orders are shipped with a roller, cleaner and application instructions. Roller is recommended when applying nameplates
- Adhesive shelf life of 24 months when stored at 72 °F (22 °C) and 50% relative humidity
- Sizes: Up to 500 sizes available
- Optional holes for mechanical fasteners

#### **Key Features**

- Metalphoto® material meets a wide array of commercial, government and military specifications
- Photographically reproduced black copy, logos and barcodes from chemicals, abrasion and high temperatures
- Earned more top scores than any other IUID barcode label material tested by the U.S. Navy.
- Notable certifications include: MIL-STD-130N, STANAG 2290, GGP-455B(3) Type I, MIL-DTL-15024F, MIL-P-19834B and A-A-50271
- Expertise in working with IUID spec from an established company with a reputation for durable and reliable products
- Anodizing process protects black copy, logos and barcodes from chemicals, abrasion and high temperatures
- Optional intensification process increases heat resistance and improves the image resistance for other environmental conditions

## **Applications**

- Asset Tracking
- Government/Military
- Outdoor/Industrial

#### **Environmental Specifications**

- Minimum Application Temperature -20 °F (-28.9 °C) or +50 °F (+10 °C) - adhesive dependent
- Temperature Range: -40 °F to +500 °F (-40 to +260 °C) adhesive dependent
- UV Resistance: Up to 20 years
- Chemical Resistance: Excellent resistance to solvents and oils, combustible and flammable chemicals and a wide variety of cleaners









**Test Results** These tests were conducted for a limited period in strict laboratory conditions. To achieve maximum satisfaction, we highly recommend any customer considering use of this product test the tags in the environment in which they will be used.

Chemical Resistance: IUID Metal Nameplates immersed in ambient room temperature conditions with inspection at time intervals noted below. NE = No Effect

| Characteristics                       | Test Conditions                | Effect   |
|---------------------------------------|--------------------------------|--|
| Water/Humidity                        |                                | NE   |
| Salt Spray                            | 5% at 95 °F (35 °C), 700 hours | Slight dulling of image, affects overall readability |
| Ethyl alcohol                         |                                | NE   |
| Ethyl acetate                         | 24 hours                       | NE   |
| Ferric chloride                       | 10%, 16 hours                  | NE   |
| Heptane                               | 72 hours                       | NE   |
| Hydrocarbon fluid                     |                                | NE   |
| JP-4 Fuel                             |                                | NE   |
| Kerosene                              |                                | NE   |
| Methyl Ethyl Ketone                   |                                | NE   |
| Nitric acid                           | 1%, 40 hours                   | NE   |
| Phosphoric acid                       | 1% 40 hours                    | NE   |
| Skydrol                               |                                | NE   |
| Sodium hydroxide                      |                                | Affects overall readability                          |
| Sulfuric acid                         | 10%, 24 hours                  | NE   |
| Turbine and jet fuel<br>(MIL-L 5161C) | (MIL-L 5161C)                  | NE   |
| Tetra Sodium Pyrophosphate            | 1%, 40 hours                   | NE   |
| Trisodium Phosphate                   |                                | NE   |
| Ammonium Hydroxide                    | 2 hrs. at 1% and 5%            | Slight dulling of image, affects overall readability |

| Abrasion Test Data |   |   |
|--------------------|---|---|
| Image Intensified  | Plates brushed for 7000<br>cycles with stiff nylon<br>wheel (CS-17) at a 1000<br>gram (35.3 oz.) load | Reduced overall readability<br>after these thresholds |

| Destructive Test Data |  |   |
|-----------------------|--|---|
| Image Intensified     | Weatherometer, 20 years equivalent                             | Reduced overall readability after these thresholds    |
| Temperature Test Data |  |   |
| Image Intensified     | 265 hrs. at 500 °F, 90<br>hrs. at 600 °F, 60 hrs. at<br>700 °F | Reduced overall readability<br>after these thresholds |

#### **Installation Instructions**

- 1. Clean the surface using Isopropyl alcohol, alcohol pad or equivalent solvent to ensure surface is free from dirt, dust, oil and misc, debris that may affect adhesion.
- 2. Handle the tag by edges, peel release liner from back ensuring not to touch the adhesive.
- 3. Place the tag in desired tagging location and firmly apply even pressure to the tag for 5 seconds.
- 4. Do not disturb the newly mounted tag for at least 72 hours to ensure proper adhesive sealing.

# **Industry Compliance**









