



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. Photo 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.

Black copy, logos and barcodes are photographically reproduced for maximum clarity and detail and then sealed within the anodic layer of the aluminum - ensuring accurate and reliable reads for years to come. Optional second colors are digitally inkjet printed.

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: Various 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
- 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 (intensified option) with black printed copy, 5 years for all other colors.
- 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 (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 cycles with stiff nylon wheel (CS-17) at a 1000 gram (35.3 oz.) load	Reduced overall readability 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 hrs. at 600 °F, 60 hrs. at 700 °F	Reduced overall readability after these thresholds

Installation Instructions

- 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.
- 1. Clean the surface using Isopropyl alcohol, alcohol pad or equivalent 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 seating.











