DURABILITY PLUS!!

Results Key

● Excellent

◉ Acceptable

○ Not Recommended

Metalphoto Environmental Properties

Finished Plate Characteristics	Abrasion Resistance	Solvent/Fuel Resistance	Temperature Resistance		Ultraviolet Light Resistance	Salt Spray/Immersion Resistance		Chemical Resistance		
								Acid	Bases	
Test Conditions	Taber Abraser with CS17 wheel, 1000 gram load for 7000 cycles.	Extended immersion in alcohol, kerosene, JP-4 jet fuel, hydraulic fluid, MEK and other organic solvents at room temperature.	Oven tested for one hour. > 400°F ≤ 750°F	Oven tested for one hour. > 750°F ≤ 1000°F	400 Hour Weatherometer test. **recognized equivalent of 20 years outdoor exposure.**	Salt Spray testing with a 5% NaCl solution at 90°F for 700 hours.	Immersed plates in sea water at ambient temperature for an extended period of time avoiding galvanic coupling.	24 hour immersion at room temperature in 3% solutions of nitric acid, sulfuric acid and ferric chloride.	24 hour immersion at room temperature in 3% solution of Clorox.	24 hour immersion at room temperature in 3% solutions of sodium or ammonium hydroxide.
Black & Aluminum, Image Intensified.	●	●	●	●	●	●	●	●	◉	○
Black on Gold* Background, Image Intensified.	●	●	●	●	●	○	○	●	◉	○
Black & Aluminum, Not Image Intensified.	●	●	●	◉	●	◉	●	●	◉	○
Black on Gold* Background, Not Image Intensified.	●	●	●	◉	●	○	○	●	◉	○
Additional Background or Selective Colors	●	●	○	○	○	◉	●	●	◉	○

Note: Users must test Metalphoto products in the specific environment anticipated. Metalphoto does not warrant performance of its materials in any environment.
*Includes Sunfast and Classic Gold Products

PERFORMANCE CHARACTERISTICS

PHOTOSENSITIVE ANODIZED ALUMINUM NAMEPLATES

Characteristic	Result
Abrasion Resistance	No pronounced image loss, degradation, or reduced readability after 7000 cycles of an abrading wheel.
Acid Corrosion	No deterioration or image degradation after 24 hours in 3% nitric acid.
Heat Resistance	No legibility loss or degradation when subjected to 1000 degrees F.
Salt Spray corrosion	No deleterious effect after a 720-hour salt spray (fog) test. 2,6 “Very good” corrosion resistance after 113 days seawater exposure.
Accelerated Light and Weather Resistance	No pronounced deterioration of legibility after 400-hour carbon arc weatherometer exposure.
Accelerated Oxygen Aging	No discoloration or fading after 96hour/300psi/70 degrees C oxygen bomb aging.
Stain Resistance	No black fading when plates are exposed to tincture of iodine.
Cleaning Resistance	No deleterious effects when tested with alkaline cleaners (MIL-C-87937 or equivalent) for aircraft surfaces.

Low Temperature Resistance	No deleterious effect or image fade after 1 hour at –50 degrees F. No impairment of legibility upon exposure at –67 F.
Organic Solvent Resistance	No softening, staining, or noticeable fade after 24-hour exposure to: JP-4 fuel, Gasoline, Mineral spirits, Methyl ethyl ketone, Turpentine, Turbine & jet fuel, Kerosene, Xylol, Acetone, Toluol, Heptane, Trichlorethylene, Mil-H-5606 Hydraulic fluid, and MIL-L-7808 jet engine oil.
Fungus Resistance	Visual reading of “0” per ASTM-G21
Thermal Shock	No deterioration after 3 cycles between –65 degrees C & 125 degrees C
Moisture Resistance	No deterioration after 10 humidity cycles per MIL-STD-202, Method 106.