

BRADY B-510 Metalphoto® PHOTOSENSITIVE ANODIZED ALUMINUM

TDS No. B-510
Effective Date: 04/14/2014

Description:

GENERAL

Material Type: Photosensitive Anodized Aluminum

Finish: metallic

Adhesive: Pressure sensitive acrylic

REGULATORY APPROVALS

Brady B-510 is RoHS compliant to RoHS Directive 2011/65/EU.

SPECIAL FEATURES

Brady B-510 meets the requirements of GG-P-455b (Type 1, Grade A or B, Class 1&2), MIL-P-514D (Composition C), MIL-P-19834B (Type I or II, Style III or IV) and MIL-DTL-15024D (Type H and G).

Details:

Performance Properties

Samples of B-510 were exposed to the conditions given in the table below. Effects to the material are noted.

CHARACTERISTIC	TEST CONDITION	EFFECT
Exterior Exposure	Black and silver image exceeds 400 hour in WeatherOmeter® Test GG-P-455b, estimated equivalent to 20 year exposure	No effect
Abrasion Resistance	Taber Abraser, CS17 grinding wheels, 1000 g/arm	Slight dulling of surface after 7000 cycles
Temperature Resistance		650°F (343°C)
Salt Spray (5% solution at 95°F (35°C))	700 hours	No corrosion

Chemical Resistance

Samples of B-510 were immersed in the chemicals given in the table below for the durations indicated. Effects to the material are noted. Testing was conducted at room temperature unless otherwise noted.

CHEMICAL REAGENT	DURATION OF EXPOSURE	EFFECT
MIL-S-3136 Type III Hydrocarbon Fluid	1 hour immersion	No effect
MIL-L-5161C Turbine and jet engine fuel	1 hour immersion	No effect
JP-4	72 hour immersion	No effect
Kerosene	12 hour immersion	No effect
Skydrol® LD-4 hydraulic fluid	24 hour immersion, room temperature and boiling point	No effect
Methyl Ethyl Ketone (MEK)	12 hour immersion	No effect
Ethyl Acetate	24 hour immersion	No effect
Xylol	24 hour immersion	No effect
Heptane	24 hour immersion	No effect
Ethyl Alcohol	72 hour immersion	No effect
10% Ferric Chloride Solution	16 hour immersion	No effect
10% Ammonium Hydroxide Solution	16 hour immersion	Slight dulling
MIL-P-21563 soap solution	16 hour immersion	No effect
25% solution MIL-C-25179 AIN in heptane (cleaning solution)	1 minute immersion	No effect
10% Sulfuric Acid solution	24 hour immersion	No effect
1% Phosphoric Acid solution	12 hour immersion	No effect
3% Nitric Acid solution	72 hour immersion	No effect
1% Trisodium Phosphate (TSP) solution	40 hour immersion	No effect
1% Sodium Hydroxide solution	1 hour immersion	Not recommended, surface attack.

Product testing, customer feedback and history of similar products, support a customer performance expectation of at least two years from the date of receipt for this product as long as this product is stored in its original packaging in an environment below 80°F (27°C) and 80% RH. We are confident that our product will perform well beyond this time frame however it remains the responsibility of the user to assess the risk of using such product. We encourage customers to develop functional testing protocols that will qualify a product's fitness for use in their application.

Trademarks:

Skydrol® is a registered trademark of Solutia Inc.

Weather-Ometer® is a registered trademark of Atlas Material Testing Technology LLC

Note: All values shown are averages and should not be used for specification purposes.

Test data and test results contained in this document are for general information only and shall not be relied upon by Brady customers for designs and specifications, or be relied on as meeting specified performance criteria. Customers desiring to develop specifications or performance criteria for specific product applications should contact Brady for further information.

Product compliance information is based upon information provided by suppliers of the raw materials used by Brady to manufacture this product or based on results of testing using recognized analytical methods performed by a third party, independent laboratory. As such, Brady makes no independent representations or warranties, express or implied, and assumes no liability in connection with the use of this information.

WARRANTY

Brady products are sold with the understanding that the buyers will test them in actual use and determine for themselves their adaptability to their intended uses. Brady warrants to the buyers that its products are free from defects in material and workmanship, but limits its obligation under this warranty to replacement of the product shown to Brady's satisfaction to have been defective at the time Brady sold it. This warranty does not extend to any persons obtaining the product from the buyers. This warranty is in lieu of any other warranty, express or implied, including, but not limited to, any implied warranty of merchantability or fitness for a particular purpose, and of any other obligations or liability on Brady's part. Under no circumstances will Brady be liable for any loss, damage, expense, or consequential damages of any kind arising in connection with the use, or inability to use, Brady's products.

Copyright 2016 Brady Worldwide, Inc. | All Rights Reserved
Material may not be reproduced or distributed in any form without written permission.

Brady North America | 6555 W. Good Hope Rd | Milwaukee, WI 53223 | USA | Tel: 414-358-6600 | Fax: 800-292-2289