BRADY
WHEN PERFORMANCE MATTERS MOST™

Technical Data Sheet

316 Stainless Steel Cable Tags

TDS No. B-7316
Effective Date: 10/23/2013

Description:
Brady B-7316 stainless steel cable tags are designed for labeling pipes, cables and wire bundles in harsh environments where extreme corrosion resistance and durability is required.

Details:
Use:
Brady B-7316 is for use in labeling pipes, cables and wire bundles in harsh environments where extreme corrosion resistance is required. Tags are to be attached using stainless steel cable ties that can be purchased separately.

Special Properties:
Brady B-7316 is made from 316 stainless steel making it extremely corrosion resistant. B-7316 can be laser etched or embossed for printed legends that are extremely durable.

B-7316 is RoHS compliant to RoHS Directive 2011/65/EU.

Material Type:
316 Stainless Steel

Thickness (PSTC-133):
0.020 in. (0.500 mm)

Service Temperature:
-112°F to 1500°F (-80°C to 815°C)

Performance properties tested on B-7316 laser etched and embossed. Unless otherwise noted results are for both printing methods.

PERFORMANCE PROPERTIES	TEST METHOD	TYPICAL RESULTS
High Service Temperature	30 days at 815°C (1500°F)	Tags turned black but print is still legible
Low Service Temperature	30 days at -80°C	No visible effect
UV Light Resistance	1000 hours in UV Sunlighter™ 100	No visible effect
Weatherability	ASTM G155, Cycle 1 1000 hours in Xenon Arc Weatherometer	No visible effect
Salt Fog Resistance	ASTM B 117 2000 hours in 5% salt fog solution chamber	No visible effect
Boiling Water Resistance	Tag soaked in boiling H20 for 1 hour	No visible effect
Liquid Nitrogen Resistance	Tag dipped in Liquid N2 for 20 minutes	No visible effect
Flame Resistance	Tag heated to cherry red	Tag discolored but still legible
Thermal Cycle Resistance	Tag heated to cherry red then dipped in Liquid N2	Tag discolored but still legible

PERFORMANCE PROPERTY	CHEMICAL RESISTANCE

Samples were marked by laser etching and embossing. Testing was conducted at room temperature. Unless otherwise noted results apply for both marking types.

REAGENT	7 DAY IMMERSION	24 HOUR IMMERSION	1 HOUR IMMERSION
Gasoline	NE	NE	NE
Water	NE	NE	NE
MEK	NE	NE	NE
Mineral Spirits	NE	NE	NE

Xylene	NE	NE	NE
Acetone	NE	NE	NE
Skydrol® 500B-4	NE	NE	NE
Ethanol	NE	NE	NE
IPA	NE	NE	NE
Motor Oil	NE	NE	NE
37% HCl	Tag dissolved	Discolored but legible	Discolored but legible
50% H_2SO_4	Embossed discolored but legible, Laser illegible	Embossed discolored but legible, Laser illegible	Discolored but legible
Acetic Acid	NE	NE	NE
25% NaOH	NE	NE	NE
20% Ammonium Hydroxide	NE	NE	NE

NE = No Effect
NT = Not Tested
F = Failed (affected Sample)

Product testing, customer feedback, and history of similar products, support a customer performance expectation of at least 5 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 60% 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 actual applications.

Trademarks:
ASTM: American Society for Testing and Materials (U.S.A.)
Skydrol® is a registered trademark of Solutia Inc.
Sunlighter™ is a trademark of the Test Lab Apparatus Company
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.
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