Technical Data Sheet

BRADY B-851 ECONOMY POLYESTER TAGS

TDS No. B-851
Effective Date: 07/28/2015

Description:
Brady B-851 Economy Polyester Accident Prevention Tag with optional 3/8" ID metal grommets.

Details:

Use:
Brady B-851 is used for marking on-the-spot warning of dangerous conditions.

Special Properties:
Brady B-851 conforms to OSHA specification 1910.145 for accident prevention tags.

Substrate Type:
Heavy duty polyester

Standard Material Colors:
White, blue, red, yellow,orange and green

Standard Legend Colors:
Black, red, green, and blue

Thickness (ASTM D 1593):
Total: 0.010 in. (0.25mm)

Pullout Strength (ASTM D 638):
75 lb (with grommet)
50 lb (without grommet)

Abrasion Resistance (Method 5306 of U.S. Federal Test Method Std. No. 191A):
CS-10 wheels, 1000 g wts.
Legend withstands up to 100 cycles
Background withstands up to 150 cycles

Service Temperature:
-40°F to 212°F (-40°C to 100°C)

Average Outdoor Durability:
3-5 years (Average expected outdoor life of product will depend on user definition of failure, climatic conditions.)

Chemical Resistance:

REAGENT	7 DAY IMMERSION	DIP TEST	RUB TEST
30% Sulfuric Acid	NE	NE	NE
10% Sulfuric Acid	NE	NE	NE
30% HCl	NE	NE	NE
10% HCl	NE	NE	NE

50% NaOH	NE	NE	NE
10% NaOH	NE	NE	NE
Methyl Ethyl Ketone	F	F	F
Acetone	NE	NE	F
1,1,1-Trichloroethane	NE	NE	F
Methanol	NE	NE	NE
IPA (Isopropanol)	NE	NE	NE
ASTM #3 Oil	NE	NE	NE
SAE 20 Oil	NE	NE	NE
Alconox®	NE	NE	NE
Toluene	NE	NE	F
Mineral Spirits	NE	NE	NE
Glacial Acetic Acid	F	F	F
5% Acetic Acid	NE	NE	NE
Diesel Fuel	NE	NE	NE
Heptane	F	NE	NE
Turpentine	NE	NE	NE
Kerosene	NE	NE	NE
Water	NE	NE	NE
Gasoline	NE	NE	NE

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

7 Day Immersion: Immersed in reagent for 7 days.
Dip Test: Five 10 minute dips in reagent with 30 minute recovery.
Rub Test: Rubbed sample for 1 minute with swab soaked in reagent.

BRADY B-851 TAGS with Optional Self-laminate

Description:
Brady B-851 Economy Polyester Tag with a 1mil clear polyester overlay.

Special Properties:
Brady B-851 tags conform to OSHA specification 1910.145 for accident prevention tags.

Substrate Type:
Heavy duty polyester with polyester overlay

Standard Material Colors:
White, blue, red, yellow, orange and green

Standard Legend Colors:
Black, red, green, and blue

Thickness (ASTM D 1593):
Total: .014 in. (0.36 mm)

Pullout Strength (ASTM D 638):
75 lb

Abrasion Resistance (Method 5306 of U.S. Federal Test Method Std. No. 191A):
CS-17 wheels, 1000 g wts.
Overlay withstands up to 1000 cycles

Service Temperature:
-40°F to 248°F (-40°C to 120°C)

Average Outdoor Durability:
Up to 8 years (Average expected outdoor life of product will depend on user definition of failure, climatic conditions.)

Chemical Resistance:

REAGENT	7 DAY IMMERSION	DIP TEST
30% Sulfu ric Acid	NE	NE
10% Sulfuric Acid	NE	NE
30% Hydrochloric Acid	NE	NE
10% Hydrochloric Acid	NE	NE
Glacial Acetic Acid	F	NE
5% Acetic Acid	NE	NE
50% Sodium Hydroxide	NE	NE
10% Sodium Hydroxide	F	NE
10% Ammonia	NE	NE
5% Sodium Hypochlorite	NE	NE
Methyl Ethyl Ketone	F	F
Acetone	F	F
Toluene	F	F
1,1,1-Trichloroethane	F	F
Methanol	F	NE
Isopropyl Alcohol	F	NE
Heptane	F	NE
Mineral Spirits	F</ font>	NE
Turpentine	F	F
Kerosene	F	NE
Diesel Fuel	F	NE
Gasoline	F	F
ASTM #3 Oil	NE	NE
SAE 20 Oil	NE	NE
10% Sodium Chloride	NE	NE
Alconox®	NE	NE
Water	NE	NE

NE = No Effect
F = Failed (affected Sample)

7 Day Immersion: Immersed in reagent for 7 days.
Dip Test: Five 10 minute dips in reagent with 30 minute recovery.
Rub Test: Rubbed sample for 1 minute with swab soaked in reagent.

BRADY B-851 Thermal Transfer Printable Tags

Description:
Brady B-851 Economy Polyester Tag.

Special Properties:
Brady B-851 tags conform to OSHA specification 1910.145 for accident prevention tags.

Substrate Type:
Heavy duty polyester

Standard Material Colors:
White, blue, red, yellow, orange and green

Standard Legend Colors:
Black, red, green, and blue

Thickness (ASTM D 1593):
Total: .014 in. (0.36 mm)

Pullout Strength (ASTM D 638):
75 lb

Abrasion Resistance (Method 5306 of U.S. Federal Test Method Std. No. 191A):
CS-10 wheels, 250g wts.
Legend withstands up to 100 cycles

Service Temperature:
-40°F to 248°F (-40°C to 120°C)

Average Outdoor Durability:
3-5 years (Average expected outdoor life of product will depend on user definition of failure, climatic conditions.)

Recommended Ribbon
Brady R6200 Series Ribbon
White and Yellow tags are only recommended bar code printing

Chemical Resistance:

REAGENT	7 DAY IMMERSION	DIP TEST
30% Sulfu ric Acid	NE	NE
10% Sulfuric Acid	NE	NE
30% Hydrochloric Acid	NE	NE
10% Hydrochloric Acid	NE	NE
Glacial Acetic Acid	F	NE
5% Acetic Acid	NE	NE
50% Sodium Hydroxide	F	NE
10% Sodium Hydroxide	F	NE
Methyl Ethyl Ketone	F	NE
Acetone	F	NE
Toluene	F	NE
Methanol	F	NE
Isopropyl Alcohol	NE	NE
Heptane	NE	NE
Mineral Spirits	NE	NE
Turpentine	NE	NE
Kerosene	NE	NE
Diesel Fuel	NE	NE
Gasoline	F	NE
ASTM #3 Oil	NE	NE
SAE 20 Oil	NE	NE
Alconox®	NE	NE
Water	NE	NE

Shelf Life:
1 year when stored at 70°F (21°C) and 40% to 50% R.H.

Trademarks:
Alconox® is a registered trademark of Alconox Co.
Signmark® is a registered trademark of Brady Worldwide, Inc.
ASTM: American Society for Testing and Materials (U.S.A.)
Fed. Spec.: United States Federal Specification (U.S.A.)
OSHA: Occupational Safety & Health Administration
SAE: Society of Automotive Engineers (U.S.A.)
All SI units (metric) are mathematically derived from the US conventional units.

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