



## **Technical Data Sheet**

# BRADY B-580 VINYL FILM WITH PERMANENT ADHESIVE

TDS No. B-580

Effective Date: 19-May-2009

#### **Description:**

Brady B-580 indoor/outdoor marking film is a high gloss, durable, flexible, pressure sensitive adhesive product, designed for use in cartridge form with the Labelizer® Plus printer, LabelLite® printer, VersaPrinter™ Label and Sign Maker System, HandiMark® Portable Label Maker, MiniMark™, PowerMark®.

#### **Details:**



#### Use:

Brady-580 is used for Pipemarker, Arrow Tape, Warehouse Marking, Warning Panels and Safety Signs.

#### **Special Properties:**

Permanent cold temperature applicable pressure sensitive acrylic

## Substrate Type:

Vinyl film

### **Standard Material Colors:**

White, red, yellow, green, blue, orange, black, gray, brown, gold, purple, clear.

## **Standard Legend Colors:**

Black, white, red, green, blue, and magenta

## Thickness (PSTC-133):

Total: 0.042 in. (0.108mm)

# **Adhesive Properties:**

Adhesion to Steel (PSTC-101)
15 Minute Dwell (Avg.) -- 70 oz/in. (76.5 N/100mm)
Ultimate Dwell (72 Hrs.) (Avg.) -- 70 oz/in. (76.5 N/100mm)
Tack (ASTM D 2979) (Avg.) -- 800 g (8 N)

## Abrasion Resistance (Method 5306 of U.S. Federal Test Method Std. No. 191A):

CS-10 wheels, 250 g wts.

The printed legend withstands up to 100 cycles.

## Gloss (ASTM D 523):

60° - 40 Gardner Units minimum

# **Minimum Application Temperature:**

0°F (-18°C)

# **Service Temperature:**

-40 °F to 180 °F (-40 °C to 82 °C)

# **Average Outdoor Durability:**

3-5 years (Average expected outdoor life of product will depend on user definition of failure, climatic conditions, mounting techniques and material color.) Ribbon and material UV resistance does not represent ribbon wear. A polyester overlaminate is recommended for harsh environments - long term exposure to wind and rain.

#### **Chemical Resistance:**

REAGENT	7 DAY IMMERSION	DIP TEST	RUB TEST
30% Sulfuric Acid	NE	NE	NE
10% Sulfuric Acid	NE	NE	NE
30% HCI	NE	NE	NE
10% HCI	NE	NE	NE
50% NaOH	NE	NE	NE
10% NaOH	F	F	NE
Methyl Ethyl Ketone	F	F	F
Acetone	F	F	F
1,1,1-Trichloroethane	F	F	F
Methanol	NE	NE	NE
IPA (Isopropanol)	F	NE	NE
ASTM #3 Oil	NE	NE	NE
SAE 20 Oil	NE	NE	NE
Alconox®	NE	NE	NE
Toluene	F	F	F
Mineral Spirits	F	NE	NE
Glacial Acetic Acid	F	F	F
5% Acetic Acid	NE	NE	NE
Diesel Fuel	F	NE	NE
Heptane	F	NE	NE
Cellosolve Acetate	F	F	F
Conc. Ammonia	NE	NE	NE
10% Ammonia	NE	NE	NE
Turpentine	F	F	F
Kerosene	F	NE	NE
Water	NE	NE	NE
Gasoline	F	F	F

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.

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

# **BRADY B-580 WITH POLYESTER OVERLAMINATE - For** extended outdoor life of ribbon and exposure to harsh environments.

# **Description:**

B-580 with clear 2 mil polyester overlaminate.

# **Substrate Type:**

Vinyl film with polyester overlaminate

# Thickness (PSTC-133):

Total: 0.0075 in. (0.19mm)

# Abrasion Resistance (Method 5306 of U.S. Federal Test Method Std. No. 191A):

CS-17 wheels, 1000 g wts.

Overlaminate withstood 2500 cycles.

# Gloss (ASTM D 523):

85 Gardner Units (60° gloss)

# **Service Temperature:**

-40°F to 176°F (-40°C to 80°C)

# **Average Outdoor Durability:**

3-5 years (Average expected outdoor life of product will depend on user definition of failure, climatic

conditions, mounting techniques and material color.)

## Chemical Resistance (with 2 mil polyester overlaminate):

REAGENT	7 DAY IMMERSION	DIP TEST	RUB TEST
30% Sulfuric Acid	NE	NE	NE
10% Sulfuric Acid	NE	NE	NE
30% HCI	NE	NE	NE
10% HCI	NE	NE	NE
50% NaOH	NE	NE	NE
10% NaOH	NE	NE	NE
Methyl Ethyl Ketone	F	NE	NE
Acetone	F	NE	NE
1,1,1-Trichloroethane	F	NE	NE
Methanol	NE	NE	NE
IPA (Isopropanol)	F	NE	NE
ASTM #3 Oil	NE	NE	NE
SAE 20 Oil	NE	NE	NE
Alconox®	NE	NE	NE
Toluene	F	F	NE
Mineral Spirits	F	NE	NE
Glacial Acetic Acid	F	F	NE
5% Acetic Acid	NE	NE	NE
Diesel Fuel	F	NE	NE
Heptane	F	NE	NE
Cellosolve Acetate	F	NE	NE
Conc. Ammonia	NE	NE	NE
10% Ammonia	NE	NE	NE
Turpentine	F	NE	NE
Kerosene	F	NE	NE
Water	NE	NE	NE
Gasoline	F	NE	NE
NF - No Effect			

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.

#### Shelf Life

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

### Trademarks:

ASTM: American Society for Testing and Materials (U.S.A.)

Alconox® is a registered trademark of Alconox Co.

All S.I. Units (metric) are mathematically derived from the U.S. Conventional

HandiMark® is a registered trademark of Brady Worldwide, Inc.

LabelLite® is a registered trademark of Brady Worldwide, Inc.

Labelizer® is a registered trademark of Brady Worldwide, Inc.

PSTC: Pressure Sensitive Tape Council (U.S.A.)

SAE: Society of Automotive Engineers (U.S.A.)

Units

VersaPrinter™ is a trademark of Brady Worldwide, Inc.

**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 2009 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