

BRADY B-348 BRADY LSZH CABLE MARKER

TDS No. B-348 Effective Date: 05/2018

GENERAL PRODUCT DESCRIPTION:

Print Technology: Thermal Transfer

Material Type: Low smoke, zero halogen type polyolefin wire marker

Available Colors: white, yellow

APPLICATIONS:

These cable markers are designed for wire identification in areas where low smoke zero halogen performance is needed. They are designed as a high performance wire bundle and cable identification tag for use in harsh environments.

RECOMMENDED RIBBONS

Brady R6000 halogen free series black ribbon Brady R6600 series black ribbon

REGULATORY APPROVALS

EN45545-2 requirement set R22/23, vehicle category HL3

SPECIAL FEATURES

Low smoke, zero halogen

Details:

| PROPERTIES | TEST METHODS | TYPICAL RESULTS | |
|-----------------------------|---------------------------------|---|--|
| Thickness | | 0.020 ± 0.003" | |
| Tensile Strength | ASTM D882, 20"/min speed | >2000 psi | |
| Ultimate Elongation | ASTM D882, 20"/min speed | >200% | |
| Heat shock | ASTM D2671, 4 hours at 175°C | No visible effect to print, no cracking when bent over mandrel | |
| Heat aging | 168 hours 150°C | Markers darken, print legible, no cracking when bent over mandrel | |
| Low temperature flexibility | 4 hours @ -55°C | No visible effect, no cracking when bent over mandrel | |
| Operating temperature | | -55 to 105°C | |
| Oxygen Index | BS EN ISO 4589-2:1999 | >32% | |
| Smoke Density | T10.03 per BS EN 45545-2 | <150 | |
| Toxic Fume | NF X 70-100:1 and NF X 70-100:2 | <0.75 | |

Chemical Resistance

Samples were thermal transfer printed with Brady R6000 halogen free series and R6600 series black ribbons. Tests were conducted at room temperature after 24 hour dwell. Testing consisted of 5 cycles of 10 minute immersions in the specified chemical reagent followed by 30 minute recovery periods. After the final immersion, the samples were removed from the test fluid and the printed image was rubbed 20 (10 double rubs) times with a cotton swab saturated with the test fluid.

| CHEMICAL REAGENT | SUBJECTIVE OBSERVATION OF VISUAL CHANGE | | | | |
|---------------------|---|----------------------------|-------------------------------|----------------------------|--|
| | R6000 PRINTING WITHOUT RUB | R6000 PRINTING WITH RUB | R6600 PRINTING WITHOUT RUB | R6600 PRINTING WITH RUB | |
| Isopropyl alcohol | 1 | 2 | 1 | 1 | |
| Methyl Ethyl Ketone | 1 | 5 | 1 | 2 | |
| Gasoline | 1 | 5 | 1 | 2 | |
| Diesel Fuel | 1 | 4 | 1 | 1 | |
| MIL 5606 Oil | 1 | 2 | 1 | 1 | |
| 20W Oil | 1 | 1 | 1 | 1 | |
| Skydrol® 500 B-4 | 1 | 5 | 1 | 1 | |
| JP-8 Jet Fuel | 1 | 1 | 1 | 1 | |
| 10% NaCl | 1 | 5 | 1 | 2 | |
| Deionized Water | 1 | 1 | 1 | 1 | |

Note that results are the same for white and yellow labels

PRINT EFFECT

- 1 = No visible effect
- 2= Slight smear or print removal, detectable but minimal smear
- 3 = Moderate smear or print removal (print still legible)
- 4 = Severe smear or print removal (print illegible or just barely legible)
- 5 = Complete print removal
- NP = print removed prior to rub

Shelf Life:

Shelf life is five years from date of receipt for this product as long as this product is stored in its original packaging in an environment at 32-95 degrees F (0-35 degrees C). It remains the responsibility of the user to assess the risk of using this product. We encourage customers to develop 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 Monsanto Company

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 2018 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