



### 1.Description

Milmark™ Phenolic Plastic is constructed in multi-layered sheets for engraving. It is used for name tags, labels and signs.

# 2.Product Code MRE-365PN

3.Thickness 1.5mm, 3.0mm

#### **4.Substrate Type**

Phenolic Plastic

### 5. Typical Properties

| Properties                                                                                                           | Results                                                                                             |
|----------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|
| Surface aspect -spots, dirt and similar surface defects -                                                            | Less than or equal 1 sq mm / sq m                                                                   |
| fibres, hairs                                                                                                        | Less than or equal 10 mm / sq m                                                                     |
| Resistance to surface wear - Revolutions                                                                             | greater than or equal 1000                                                                          |
| Resistance to immersion in boiling water (2 hrs at 100 deg C) -mass increase                                         |                                                                                                     |
| -thickness increase                                                                                                  | Less than or equal 2 %<br>Less than or equal 2 %                                                    |
| -appearance                                                                                                          | Rating 4                                                                                            |
| Resistance to dry heat (180 deg C/20)                                                                                | Rating greater than or equal 4                                                                      |
| Resistance to wet heat (100 deg C/20)                                                                                | Rating greater than or equal 4                                                                      |
| Dimensional stability at ambient temperature -Machine direction (Longitudinal) -Cross machine direction (Tranversal) | L less than or equal 0.30 %<br>L less than or equal 0.45 %                                          |
| Resistance to impact with small diameter ball                                                                        | Rating greater than or equal 20 N                                                                   |
| Resistance to scratching                                                                                             | Rating 3 (2N)                                                                                       |
| Resistance to staining                                                                                               | Group 1 e 3 Rating Rating greater than or equal 5 Group 3 e 4 Rating Rating greater than or equal 4 |
| Resistance to colour change in Xenon-arc light                                                                       | Grey scale Rating greater than or equal 4                                                           |
| Resistance to cigarette burns                                                                                        | Rating 5                                                                                            |

Effective Date: 01-Dec-2009

## Technical Data Sheet Milmark™ Tag & Sign



5. Typical Properties

| Properties                               | Results                                             |
|------------------------------------------|-----------------------------------------------------|
| Resistance to steam                      | Rating greater than or equal 4                      |
| Resistance to crazing                    | Rating greater than or equal 3                      |
| Surface electrical resistivity           | Antistatic<br>10 ohms                               |
| Flatness ( Measured on full size panel ) | Maximum deviation t=1.5mm: 12 mm/m t=3.0mm: 18 mm/m |
| Thermal conductivity                     | 0.25 W/m K                                          |
| Density                                  | 1.5 g/ cu cm                                        |
| Reaction to fire                         | Class 2                                             |
| Smoke density                            | Class F2                                            |
| Formaldehyde emission                    | Greater than or equal 0.2 mg/h sq m                 |
| Pentachlorophemol (PCP)                  | Absent                                              |

#### Note

- 1. We strongly believe that our products sold should be tested thoroughly under end-use conditions to ensure they meet the requirements of your application.
- 2. We offer the test data and test results for your general information only. We do not recommend that you use this information for designs and specifications, or on as meeting specified performance criteria. If you are seeking to develop specifications or performance criteria for a specific product application, please call us for further information.
- 3. Our product compliance information is drawn from:
- (a) test results conducted by a third party, independent laboratory using established methods, or (b) information offered by the respective manufacturer or supplier.

Thus, we do not represent nor warrant (express or implied), nor do we assume liability in connection with the use of this information.

#### Warranty

- 1.We guarantee our products to be free from manufacturing defects for one (1) year from the date of purchase. We shall, at our option, replace the product found to be defective within this warranty period.
- 2. This warranty extends to the original buyer of this product only. All others are not eligible to return products to us for warranty consideration.
- 3. 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 our part.

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4.In no event shall we be held responsible or liable for any loss, damage, expense, or incidental or consequential damages of any kind arising in connection with the use, or inability to use, our products.

5.We require that samples of the failure be submitted when a claim is made and before a remedy is offered

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