



## PERFORMANCE, INNER DOOR WATERSHIELD WITH PRESSURE SENSITIVE ADHESIVE

WSS-M15P36-A2

### 1. SCOPE

This specification defines the minimum performance requirements for an inner door and other closure watershield. It is comprised of a base material with pressure sensitive adhesive (e.g. butyl, hot-melt bead, film) applied on one side, in specified areas. Additional formed sections may be included as required.

### 2. APPLICATION

This specification was released originally for materials used for water shield applications.

### 3. REQUIREMENTS

Material specification requirements are to be used for initial qualification of materials.

#### 3.0 STANDARD REQUIREMENTS FOR PRODUCTION MATERIALS

Material suppliers and part producers must conform to the Company's Standard Requirements For Production Materials (WSS-M99P1111-A).

#### 3.4 BASE MATERIAL

3.4.1 Tear Strength, min (ASTM D 1004) 7 N

3.4.2 Dimensional Stability, max (ASTM D 3575)

- 24 h at 80 +/- 2 °C +/- 3%
- 15 minutes at 100 +/- 2 °C +/- 6%

3.4.3 Cold Flexibility No Cracks

Test Method: Cut 25 x 150 mm strips in both directions. Condition the strips and a 13 mm diameter mandrel at -40 +/- 2 °C for 4 h. Bend the conditioned strips 180° around the mandrel within 2 - 3 s.

3.4.4 Flammability (ISO 3795/SAE J369)

Burn Rate, max 100 mm/minute

| Date       | Action   | Revisions                                                          |
|------------|----------|--------------------------------------------------------------------|
| 2007 07 26 | Revised  | Inserted 3.0; Deleted 3.1, 3.2, 3.3, 3.11, 3.12 & 4                |
| 2001 12 14 | Revised  | Revised 3.5, 3.6.3, added 3.8 & renumbered L. Soreide, J. Williams |
| 1995 07 21 | Released | C10537740 P. Thomas                                                |



- 3.4.5 Fogging  
(SAE J1756, 3 h at 100 °C heating, 21 °C cooling  
plate, post test conditioning 1 h and 16 h)

Fog Number, min 70

Formation of clear film, droplets or crystals is cause for rejection.

Adhesive must not adversely affect the result.

- 3.4.6 Odor, max  
(FLTM BO 131-01)

Rating 2

Adhesive must not adversely affect the result.

**3.5 THICKNESS, mm**  
(ISO 1923)

As specified on the  
Engineering Drawing/  
Document

**3.6 BASE MATERIAL WITH ADHESIVE**

All testing must be conducted on production representative topcoat or basecoat/clearcoat test panels using the same paint type as used in the intended assembly plant or plants.

All samples must be must be conditioned for 2 h at 23 +/- 2 °C and 50 +/- % relative humidity prior to testing

- 3.6.1 Peel Adhesion Strength, min  
(ASTM D 1000, 90° peel angle,  
Specimen dimension 300 x 25 mm,  
test speed 300 mm/min, moving plate)

Original 4 N/25 mm width

After Humidity Aging, Change, max  
(2 h after bonding expose for 24 h  
at 38 +/- 2 °C and 95 +/- 5% relative  
humidity, recondition for 2 h at  
23 +/- 2 °C and 50 +/- 5% relative humidity)  
-50%

- 3.6.2 Shear Adhesion Strength, min  
(FLTM BU 151-01, Method A,  
bonding area to be 10 x 25 mm,  
test speed 25 mm/min)

Failure in the base material prior to failure of the adhesive constitutes a pass.

Original 15 N/cm<sup>2</sup>

After Heat Aging (14 days at 80 +/- 2 °C) 3 N/cm<sup>2</sup>