



PERFORMANCE, GENUINE SEATING LEATHER, STANDARD TOP COAT

WSS-M99P43-E1

PERFORMANCE, GENUINE SEATING LEATHER, ADVANCED DENIM DYE BARRIER TOP COAT

WSS-M99P43-E2

1. SCOPE

This specification defines the performance requirements for interior seating leather.

2. APPLICATION

This specification outlines the performance of chrome or chrome free tanned seating leather. Refer to the Material Specification for chrome or chrome free tanned directive. This specification is for interior seating materials for the areas of automotive seat cushions, bolsters, inserts and backs.

WSS-M99P43-E1 is defined as genuine, seating leather with standard topcoat that meets haptic and performance specification requirements.

WSS-M99P43-E2 is defined as genuine, seating leather with the additive to meet denim dye barrier requirements while maintaining haptic and performance specification requirements.

This suffix level of specification (E1/E2) will go into effect for any new construction and color approvals for production MY 2022. All other model years prior to 2022 were approved under the D suffix and will be deemed carry-over for construction and color if there are no changes. New colors for model years prior to MY 2022 on already approved leather/grain combinations must meet the E1/E2 suffix for color properties.

2.1 LIMITATIONS

This leather is not intended for the applications of steering wheel, gear or shift boot, or instrument panel. For those applications, refer to:

WSS-M1F21-D1/latest	Split grain leather, genuine, finished steering wheel, shift knobs.
WSS-M1F22-D1/latest	Top grain leather, genuine, finished steering wheel, shift knobs
WSS-M1F32-A1/latest	Luxury top grain leather, genuine, finished steering wheel, shift knob, shift boot and driver air bag cover.
WSS-M1F25-B/latest	Leather, genuine full grain, chrome free, instrument panel, door top roll, center console and other interior trim.

WSS-M98P12-C2/latest Performance leather steering wheel, shift knob or boot

Leather meeting this performance specification and used in soft interior components may need to meet the applicable performance specification such as:

WSS-M15P45-C/latest	Assembly performance instrument panel and soft interior components, flexible cover skin material
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Date	Action	Revisions	Rev. 00
2018 06 15	Released		



3. REQUIREMENTS

In addition to the requirements listed herein, the leather shall meet all requirements of the applicable material specification. The material specification shall take precedence over the performance specification for any requirement that differs from the performance specification.

3.1 APPROVED SOURCES

This specification is performance based and does not have approved sources.

3.2 CONDITIONING AND TEST CONDITIONS

All test values based on material conditioned for not less than 24 h prior to testing in a controlled environment of 23 +/- 2 °C and 50 +/- 5% relative humidity. Testing of the material should occur in the conditioning environment or soon after removal.

3.3 No buffing, stuccoing, filling or other repair permitted unless otherwise stated on individual Material Specifications.

3.4 It is the leather suppliers' responsibility to inform the Just in Time (JIT) seat supplier that subjecting leather to steam or radiant heat or organic solvents during any manufacturing process will adversely affect the hand and appearance characteristics.

3.5 LEATHER TRIM FEASIBILITY

Leathers satisfying this specification must pass the Interior Seating Trim Cover Phase II process. Refer to the Regional Core Seat Engineering Team for the Process Guidelines and Requirements.

3.6 SAMPLE SELECTION LOCATIONS

The location of the test samples is described in ISO 2418 or ASTM D2813 for physical testing of leather samples. Samples to be taken for the belly and backbone areas as noted in Table 1.

3.7 APPEARANCE

The color, grain, gloss and hand shall match the approved Corporate Design master sample.

No modifications are allowed once the Master Sample is developed and MCDCC's are signed without notifying Color and Materials and Materials Engineering.

All regional manufacturing locations for the same grain and haptic must match the approved Corporate Design Master sample.

3.8 FOGGING (GRAVIMETRIC)

(SAE J1756, 16 h at 100 °C heating, 21 °C
Cooling plate, post testing conditioning, 4 h)

Weight of Condensate

4.0 mg max

After conditioning, the samples shall be pre-dried by storing in a desiccator over silica gel or equivalent for a period of 2 days.

For shipping, all materials or parts shall be sampled immediately after manufacture, then bagged in a zipper- or slide-sealed polyethylene (PE) bag, PE-coated aluminum bag or wrapped in aluminum



foil prior to bagging. Test specimens shall be cut, then stored in a clean, open environment for 14-28 days. After 14-28 days of air exposure, the specimens shall be tested immediately or re-bagged until testing can be performed. Bagged materials or parts must be labelled on the outside of the bag with the following information, and included in the test report: supplier, contact information, product code/trade name or part number, manufacturing location, date of manufacture, shipping date, start and end dates of conditioning period and test date.

Sample shall be tested as part of a production assembly composite if it is, 100% bonded. If not 100% bonded, test each component separately. Parts for testing must be labelled with supplier and date of manufacture.

3.9 ODOR

(FLTM BO 131-03-Variant C)

Condition 1	Rating 3 max
Condition 2	Rating 3 max
Condition 3	Rating 3 max

Sample shall be tested as part of a production assembly composite if it is, 100% bonded. If not 100% bonded, test each component separately.

3.10 FLAMMABILITY

(ISO 3795)

Burn Rate 100mm/minute max

Sample shall be tested as part of a production assembly composite if it is 100% bonded. If not 100% bonded, test each component separately.

3.11 CONSTRUCTION PROPERTIES

3.11.1 Cold Flexibility No Visible Cracks
(SAE J323, Method A, Exceptions are -30 °C and specimen size 25.4 mm)

The material must remain flexible and not exhibit cracks when viewed under 6x magnification.

3.11.2 Bally Flex Test
(FLTM BN 162-01)

Test 3 specimens in each direction (backbone and belly) to the number of cycles specified below. Retain all tested specimens and submit for evaluation by Materials Engineering.

3.11.2.1 Original 100,000 cycles Rating 1 max

3.11.2.2 After Long Term Environmental per 3.12.2, 30, 000 cycles Rating 1 max

3.11.3 Breaking Strength 400 N min
(ASTM D2208, Grab Method, Any direction)

3.11.4 Elongation at 50 N 40% max
(ASTM D5034, Grab Method, Rate 300 mm/min
Distance of grips 75 mm, Average of 5 samples
in both Belly and Backbone directions)

