



Dust-Out From Fiber Sound Absorber Pad

1 Introduction

Note: Nothing in this standard supercedes applicable laws and regulations.

Note: In the event of conflict between the English and domestic language, the English language shall take precedence.

1.1 Purpose. This procedure describes a method for measurement of dust-out from fiber sound absorber pad. It applies to both needled and resin-bonded constructions and to unfaced as well as coated and film-covered materials.

1.2 Applicability. This procedure is intended for use in assembly plants and/or production quality control.

2 References

Note: Only the latest approved standards are applicable unless otherwise specified.

2.1 External Standards/Specifications.

IATF 16949 ISO 17025

2.2 GM Standards/Specifications.

None

3 Resources

3.1 Facilities. Facilities must be certified to ISO 17025 and/or certified to IATF 16949 and be acceptable to the responsible GM department. Supplier shall submit a letter of compliance.

3.1.1 Calibration. The test facilities and equipment shall be in good working order and shall have a valid calibration label.

3.1.2 Alternatives. Alternative test facilities and equipment may also be used. However, all measuring variables as specified in this standard shall be determined correctly with respect to their physical definition.

3.2 Equipment.

3.2.1 Cutting dye, 50 mm × 50 mm.

3.2.2 Cutting press.

3.2.3 Coated metal can with lid.

3.2.4 Air-circulating oven.

3.2.5 Balance that weighs in grams.

3.2.6 Low-pressure air line with nozzle opening 5 mm ± 0.5 mm.

3.2.7 Isopropyl alcohol.

3.2.8 Lint-free cloth.

3.3 Test Vehicle/Test Piece.

3.3.1 Cut four (4) specimens using cutting press and cutting dye to 50 mm × 50 mm.

Note: Do not disturb or remove any loose fibers or dust from samples after cutting.

3.4 Test Time. Reference the lab test procedure(s) in Section 4 for timing details.

3.5 Test Required Information. Not applicable.

3.6 Personnel/Skills. Per laboratory accreditation requirements.

4 Procedure

4.1 Preparation. Not applicable.

4.2 Conditions.

4.2.1 Environmental Conditions. Not applicable.

4.2.2 Test Conditions. Deviations from the requirements of this standard shall have been agreed upon. Such requirements shall be specified on component drawings, test certificates, reports, etc.

4.3 Instructions.

4.3.1 Place the four (4) test specimens in an air-circulating oven at +100 °C for 1 h.

4.3.2 After 1 h at +100 °C, remove specimens and immediately weigh each specimen to the nearest 0.01 g.

4.3.3 Moisten lint-free cloth with alcohol and wipe the inside of the metal can. Allow can to dry for 15 minutes.

4.3.4 Place four (4) specimens in the can and seal with lid.

4.3.5 Shake the can 150 times ± 2 times within 60 s.

4.3.6 Remove the specimens from the can. Holding the low-pressure air nozzle about 200 mm from each of the specimens, gently blow all loose material from the specimens.

4.3.7 Place the four (4) specimens in an air-circulating oven for 1 h at +100 °C.

4.3.8 After 1 h at +100 °C, remove specimens and weigh each to the nearest 0.01 g.

5 Data

5.1 Calculations.

5.1.1 Calculate the percent dust loss on each specimen per the following equation:

$$\% \text{ Dust} = \frac{\text{Initial Weight} - \text{Final Weight}}{\text{Initial Weight}} \times 100$$

5.2 Interpretation of Results. Not applicable.

5.3 Test Documentation. Report the individual percent dust loss values for each specimen and the average percent dust loss.

6 Safety

This Engineering Standard may involve safety requirements for hazardous materials, the method of operations and equipment. This standard does not propose to address all the safety issues associated with its use. It is the responsibility of the user of this standard to ensure compliance with all appropriate safety and health practices. This would include any specific training that may be required. The safety and health standards include site specific rules and procedures, company rules and procedures, and Government Standards. Contact shall be made with the appropriate site Safety and Health personnel for further direction and guidance in these matters.

7 Notes

7.1 Glossary. Not applicable.

7.2 Acronyms, Abbreviations, and Symbols.

GMNA	General Motors North America
GSSLT	Global Subsystem Leadership Team
ISO	International Organization for Standardization