



Deadener – Low Film Build Waterborne, Airless, Chip Resistant, Fast Cure

1 Scope

This specification details the requirements of a low film build waterborne, fast cure, sound deadening material which can be applied by airless spray to primed or topcoated surfaces.

1.1 Material Description. The material must be a smooth and homogeneous mixture that contains no lumps, air, unmixed particles or foreign materials.

1.1.1 The material must be capable of being dispensed with approved production pumping and application equipment.

1.1.2 The material must not exhibit a noxious odor or adversely affect personnel handling it at any time.

1.1.3 The material must not contain corrosion-causing ingredients.

1.2 Symbols. Not applicable.

1.3 Applicability. The material is typically applied to the wheelhouse area of the vehicle and deadens the noise of stone impacts as well as provide some protection against stone chipping.

1.4 Remarks. This material is an “Air Dry” material and is not designed to be processed through any paint shop ovens. It is also for exterior use, not to be used on interior applications.

2 References

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

2.1 External Standards/Specifications.

None

2.2 GM Standards/Specifications.

GM249M

2.3 Additional References.

TMC003 Material Safety Data Sheet guidance documents (available at www.gmsupplypower.com).

3 Requirements

3.1 Performance Requirements. Specific material requirements and appropriate test methods are listed in GM249M under Properties.

3.1.1 Specific Gravity. Typically 1.7. However, an individual specific gravity range, for each approved source, shall be set at the time of approval to this

3.2 Production Part Approval Process (PPAP). In addition to the requirements previously detailed, all new material must comply with and meet all PPAP documentation requirements including, but not limited to, Product- and Process-specific Design Matrix, Design Failure Mode & Effects Analysis (DFMEA), Process Failure Mode & Effects Analysis (PFMEA), Key Product Characteristic (KPC), Key Control Characteristic (KCC), Process Flow and Control Plan, Formulation Footprint, Process Capability Study and Measurement Systems Analysis.

3.3 Submission Package. Two (2) submission packages shall be prepared for distribution. One (1) package shall be prepared for GM Paint Engineering and the other for documentation retention to ensure company product compliance with GM standards. Any exposure and/or accelerated weathering test panels shall be retained by the supplier and be available for review as long as the product is in production. The submission packages shall contain a submission letter, panel preparation data, test data, product data sheet, bake charts

and PPAP data. The package shall be dated and signed by the responsible GM Paint Engineer acknowledging that the test results met this specification.

4 Manufacturing Process

Not applicable.

5 Rules and Regulations

5.1 Legal Regulations. All materials must satisfy applicable laws, rules, regulations and recommendations valid in the country of usage.

5.2 Language. In the event of conflict between the English and domestic language, the English language shall take precedence.

5.3 Inspection and Rejection. Samples of components or materials released to a GM material specification shall be tested for conformity with the requirements of this material specification and approved by the responsible Engineering department prior to commencement of delivery of bulk supplies.

A new approval must be received for any changes, e.g., properties, manufacturing process, location of manufacture, etc. If not otherwise agreed, all testing and documentation normally required for initial release must be completed.

It is the responsibility of the supplier to inform the customer in a timely manner, without solicitation, and to include documentation of all modifications of materials and/or processes and to apply for a new release.

5.4 Material Safety Data Sheets/Safety Data Sheets (MSDS/SDS). For new product submissions, or when a change in chemical composition of an existing product has occurred, a complete copy of the Material Safety Data Sheet/Safety Data Sheet must be submitted in compliance with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS) requirements or other country-specific MSDS/SDS requirements. In addition, product MSDS/SDS submissions must be in compliance with specific country General Motors TMC003 Material Safety Data Sheet/Safety Data Sheet guidance documents where available.

5.5 All materials supplied to this standard must comply with the requirements of the International Material Data System (IMDS) and GMW3059, **Restricted and Reportable Substances**.

5.6 All shipments of materials or parts under contract or purchase order manufactured to this specification shall be equivalent in every respect to the initial samples approved by GM Engineering. There shall be no changes in formulation or manufacturing process permitted without prior notification and approval by GM Paint & Polymers Engineering. Lack of notification by the supplier constitutes grounds for rejection of any shipment. While samples may be taken from incoming shipments and checked for conformance to this specification, the supplier shall accept the responsibility for incoming shipments meeting this specification without dependence upon purchaser's inspection. In addition, the supplier shall be responsible for submitting a Certificate of Analysis with each batch of material arriving at a plant. This document shall be prepared and provide the data for Key Product Characteristics of this material as defined in GM249M.

5.7 Source Shipment Responsibility. It will be the responsibility of the supplier to ensure that the material is not exposed to temperatures during shipment which would cause the material to fail to meet any of the requirements of this specification.

6 Approved Sources

Materials supplied to this specification must be approved by General Motors.

The appropriate GM Materials Engineering Department (Product Engineering or Manufacturing Engineering) must confirm materials as meeting the requirements of this specification. Only materials/sources listed in the GM Materials File (MATSPC) under this standard number have been qualified by Engineering as meeting the requirements of this standard.

7 Notes

7.1 Glossary.

MATSPC: Global repository of GM approved materials for corresponding GM Engineering Standards.

7.2 Acronyms, Abbreviations, and Symbols.

DFMEA Design Failure Mode & Effects Analysis

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