



Anticorrosion Cavity Wax, 100% Solids Content

1 Scope

This specification details the requirements for a 100% solids content anticorrosion cavity wax.

1.1 Material Description. Materials qualified to this standard are wax-based coatings intended to provide additional corrosion protection to cavities of completely painted vehicle bodies. This type of cavity wax utilizes a short gel oven followed by a cooling stage to accelerate the cure process and prevent wax drips throughout the vehicle assembly process.

1.2 Symbols. Not applicable.

1.3 Applicability. Materials qualified to this standard are typically applied after all Paint Shop paint ovens and shall be capable of being either manually or automatically applied. Typical application areas include rockers, structural rails and closure lowers.

1.4 Remarks. The following special requirements apply during shipping and storage.

- The material temperature shall be maintained at 10 °C (50 °F) to 30 °C (86 °F).
- Materials that utilize an oxidative cure process require a protective gas atmosphere, typically carbon dioxide (CO₂) or nitrogen (N₂), in the head space of the delivery container to prevent curing.

2 References

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

2.1 External Standards/Specifications.

ISO/TS 16949

2.2 GM Standards/Specifications.

GMW3059

GMW14270

GMW15416

2.3 Additional References.

Advanced Product Quality Process

3 Requirements

3.1 All materials supplied to this standard must comply with GMW3059, **Restricted and Reportable Substances**, including the requirement to submit a full material composition disclosure to GM via the International Material Data System (IMDS) or via a completed GMW3059 report form.

3.2 Submission Requirements. Materials qualified to this standard shall meet the requirements for 100% solids content cavity wax according to GMW15416 and the additional requirements included here.

3.3 Compatibility with Plant Specific Materials and Processes. Prior to implementation of this material into any assembly plant, compatibility testing is required with any unique plant specific materials and/or process conditions not previously evaluated, as specified by the regional plant specific Material Contact Engineer.

3.4 Additional Requirements. Product approval is required under established guidelines outlined in ISO/TS 16949. At product approval the supplier is expected to have reviewed to GM's satisfaction specific documentation outlined in Advanced Product Quality Process (i.e., Design Failure Mode and Effects Analysis, Process Failure Mode and Effects Analysis, Key Product Characteristic, Key Control Characteristic, and Manufacturing Control Plans).

4 Manufacturing Process

All shipments of material or parts under contract or purchase order manufactured to this specification shall be equivalent in every respect to the initial samples approved by Engineering. There shall be no changes in either formulation or manufacturing processes permitted without prior notification and approval by 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 the 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.

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 Initial Source Approval. No shipment shall be made by any supplier until representative initial production samples have been approved by the Vehicle System Paint – Materials engineer as to meeting the requirements of this specification.

5.5 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.

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 Approved Source List under this standard number have been qualified by Engineering as meeting the requirements of this standard.

Engineering qualifications of an approved source are required for this standard. Only sources listed in the GM Materials File (i.e., GM SupplyPower) under this standard number have been qualified by engineering as meeting the requirements of this standard. To access this list, reference GMW14270 for latest location.

7 Notes

7.1 Glossary. Not applicable.

7.2 Acronyms, Abbreviations, and Symbols.

CO ₂	Carbon Dioxide
GHS	Globally Harmonized System of Classification and Labeling of Chemicals
IMDS	International Material Data System
MSDS	Material Safety Data Sheet
N ₂	Nitrogen