

3.7 Bake Window. Cure charts must be developed as specified in GMW17105 to define technology limits for each product. Once developed and approved, the bake chart is signed by the approving GM Vehicle Systems Paint Engineer and is the only acceptable document for defining cure.

3.8 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 Planning (APQP). Examples of this documentation are to include Design Failure Mode and Effects Analysis (DFMEA), Process Failure Mode and Effects Analysis (PFMEA), Key Product Characteristic (KPC), Key Control Characteristic (KCC) 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 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.

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**.

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.

For other GM locations, the responsible engineering group should be contacted to obtain the approved source in that individual country.