GM	WORLDWIDE ENGINEERING STANDARDS	Material Specification	GMW16754

Performance Requirements - Decal on Emblem Bezel

1 Scope

1.1 Material Description.

1.1.1 General Construction. The emblem assembly usually consists of a decal with pressure-sensitive adhesive recessed in a mold in color, painted or chromed bezel. Additional specific construction and appearance requirements need to be described on the part drawing. See Figure 1 for examples of this construction.

Figure 1: Decal on Emblem Bezel Examples

1.2 Symbols. Not applicable.

1.3 Applicability. Exterior emblems.

1.4 Remarks. Decals must meet the requirements of GMW16243.

2 References

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

2.1 External Standards/Specifications.

None

2.2 GM Standards/Specifications.

GMW3059	GMW14124	GMW16243
GMW3221	GMW14729	GMW16745

2.3 Additional References.

Safety and Industrial Hygiene (S&IH) Technical Standard (TS), S&IH TS 3.4-160-02

3 Requirements

3.1 Requirements on Test Specimens. Reference GMW3221. All samples are to be conditioned prior to each performance requirement test. Use GMW3221 Code A unless otherwise specified.

3.2 Environmental Performance Tests.

3.2.1 Scope. Test five emblem assemblies through each environment (a total of 15 assemblies minimum) in Table 1 to prove good performance across a range of environmental exposures.

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Table 1: Environmental Tests for Initial Approval

Properties	Test Method
Heat Aging	168 h at 80 °C in an air-circulating oven
Thermal Cycling	GMW14124 Cycle C, two cycles
Humidity Resistance	GMW14729, either Option A or Option B, 168 h exposure

3.2.2 Requirement: Environmental Performance. After each exposure in Table 1, the decal shall display no unfavorable effects, such as color change, gloss change, tackiness, distortion, loss of adhesion, tearing, bubbling, etc.

3.3 High-pressure Wand Resistance. Test five emblem assemblies to the high-pressure wand car wash resistance test, GMW16745 Method A. Do not scribe the part. Run five cycles a total of 3 s, reviewing the decal for loss of adhesion to the bezel after each cycle.

3.4 Continuous Conformance Testing. A minimum of five emblem assemblies per production lot shall be tested to the high-pressure wand resistance test per 3.3.

3.5 All materials supplied to this standard must comply with GMW3059, **Restricted and Reportable Substances**, including the requirement to obtain a GM-approved International Material Data System (IMDS) submission.

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 S&IH TS 3.4-160-02 where available.

6 Approved Sources

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

The appropriate GM Materials Engineering department(s) must confirm material as meeting the requirements of this specification. Any test data sheets of material submitted to General Motors for such confirmation (e.g., during Production Part Approval Process (PPAP)) under this material specification must list all properties and must apply corresponding test methods of this material specification.

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