



Heat Aged Engine Oil

1 Scope

1.1 Material Description. Engine oil according to GMW16955 Code F.

1.2 Symbols. Not applicable.

1.3 Applicability. For testing of elastomer and other gasket materials. The test oil shall be used in accordance with the relevant material specifications, test specifications, test methods, engineering drawings, etc.

1.4 Remarks. See reference to GMW16955 Code F.

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

GMW16955

2.3 Additional References.

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

3 Requirements

Engine oil according to GMW16955 Code F, aged 72 h -2 h at $+175\text{ }^{\circ}\text{C} \pm 3\text{ }^{\circ}\text{C}$. Aging is done in 2 L beaker without spout covered with a watch glass. Beaker is filled 50% with engine oil. See Figure 1.



Figure 1: Example of Breaker With 50% Engine Oil

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.

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

Not applicable.

7 Notes

7.1 Glossary.

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

7.2 Acronyms, Abbreviations, and Symbols.

GHS	Globally Harmonized System of Classification and Labeling of Chemicals
IMDS	International Material Data System
MSDS	Material Safety Data Sheet
PPAP	Production Part Approval Process
SDS	Safety Data Sheet

8 Coding System

This standard shall be referenced in other documents, drawings, etc., as follows:

Material per GMW17245

9 Release and Revisions

This standard was originated in September 2014. It was first approved by the Materials - Elastomers Global Subsystem Leadership Team in January 2015. It was first published in January 2015.

Issue	Publication Date	Description (Organization)
1	January 2015	Initial publication.