



ENGINEERING STANDARDS

Material Specification

SUPERCEDED
9986405

Brake Bearing and Knuckle Grease

Do Not Use on New Programs; Replaced by 9986457
NOTE: The 9986405 part number may still be active.

1 Scope

1.1 Material Description. This specification defines grease formulated with synthetic hydrocarbon oil and calcium sulfonate thickener with a National Lubricating Grease Institute (NLGI) rating of 2.

1.2 Symbols. Not applicable.

1.3 Typical Applications. This grease is designed primarily for automotive brake applications and other automotive applications requiring thermal stability, corrosion protection, and resistance to water washout.

1.4 Remarks. Not applicable.

2 References

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

2.1 External Standards/Specifications.

ASTM D217	ASTM D2265	DIN 51802
ASTM D445	ASTM D2596	

2.2 GM Standards/Specifications.

None

3 Requirements

3.1 General Requirements.

3.1.1 Base Oil. Synthetic hydrocarbon shall be the base oil.

3.1.2 Lubricating Solids. Calcium sulfonate shall be the thickener.

3.2 Specific Requirements.

3.2.1 Dropping Point (ASTM D2265). > 299 °C (> 570 °F).

3.2.2 Penetration, Worked, 60 Strokes (ASTM D217). 26.5 mm to 29.5 mm.

3.2.3 Four Ball Wear Load (ASTM D2596). 4903 N.

3.2.4 Kinematic Viscosity (ASTM D445) at 40 °C (104 °F), mm²/s. 110 mm²/s.

3.2.5 Operating Temperature Range. -29 °C to 177 °C (-20 °F to 350 °F).

3.2.6 SKF-EMCOR Anti-rust Performance (DIN 51802) Rating. 0 to 0.

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.

6 Approved Sources

Not applicable.

7 Notes

7.1 Glossary. Not applicable.

7.2 Acronyms, Abbreviations, and Symbols.

GSSLT Global Subsystem Leadership Team

NLGI National Lubricating Grease Institute

8 Coding System

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

Material per 9986405

9 Release and Revisions

This standard was originated in September 2013. It was first approved by GMNA Fuels, Fluids, and Lubricants in January 2014. It was first published in January 2014.

Issue	Publication Date	Description (Organization)
1	JAN 2014	Initial publication.
2	JUN 2019	Superceded by 9986457. (Materials)