

ICS 75.100
CCS E 36



**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 5018-2008

Replacing GB/T 5018-1985

**Standard test method for determining corrosion preventive
properties of lubricating greases**

润滑脂防腐蚀性试验法

(English Translation)

Issued on: February 13, 2008

Implemented on: September 1, 2008

Issued by: Standardization Administration of China

Table of Contents

Foreword
1 Scope
2 Normative references
3 Terms and Definitions
4 Summary
5 Significance and Uses
6 Instruments

Foreword

This revised standard adopts the American Society for Testing and Materials standard ASTM D1743-05a "grease corrosion test method." this standard redrafted according to ASTM D1743-05a.

In order for our country, the present standard when using ASTM D1743-05a been modified. This standard ASTM D1743-05a the main differences are as follows.

--- Reference standard using China's current national standards and petrochemical industry standards.

--- Motor speed increases the optional speed 1450r/min $\pm$ 50r/min of.

--- Figure involved in imperial units converted to SI units.

--- Remove the keyword chapter.

This standard replaces GB/T 5018-1985 "Grease corrosion test method", GB/T 5018-1985 reference ASTM D1743. 1973 (81) established.

The main changes compared to 5018-1985 standard and GB/T as follows.

--- Press ASTM D1743-05a test procedure has been modified.

--- Test bearings from the 7604 Timken bearings or bearings (cone No.09074, outer No.09169) to model LM11949 and LM11910 bearing cone bearing outer ring of the bearing.

--- Test results assessed by ASTM D1743-05a been modified.

--- Precision press ASTM D1743-05a been modified.

--- This standard GB/T 5018-1985 Appendix A to Appendix A (informative) "Release Notes", and added Appendix B (Informative) "alternative test method for corrosion prevention." the

Standard Appendix A and Appendix B are informative.

The standard proposed by China Petroleum and Chemical Corporation.

The standard by the China Research Institute of Petroleum Corp. petrochemicals.

This standard was drafted. China Petroleum & Chemical Corporation Research Institute of Petroleum.

1 Scope

This standard specifies the conditions under wet coated with grease tapered roller bearing grease to measure corrosion. This standard is According to the technical documentation can be expressed CRC laboratory evaluation result corresponds with the actual use of the results of aircraft wheel bearings with grease lubrication of L41 developed.

Note: American Scientific Partnership Committee (CRC) technical documents L41-957 studied in the presence of free water corrosion test grease square law. CRC's address 219PerimeterCenterParkway, Atlanta, GA30346. USA.

This standard is not intended to point out all of the safety problems, so users in the use of this standard to establish appropriate safety and health practices and Determine the applicability of the management system.

2 Normative references

The following documents contain provisions which, through reference in this standard and become the standard terms. For dated references, subsequent Amendments (not including errata content) or revisions do not apply to this standard, however, encourage the parties to the agreement are based on research Whether the latest versions of these documents. For undated reference documents, the latest versions apply to this standard.

GB/T 6682 Water Analysis Laboratory specifications and test methods (GB/T 6682-1992, neq ISO 3696. 1987) SH0005 industrial paint solvent oil

3 Terms and Definitions

The following terms and definitions apply to this standard.

A material, usually a chemical or electrochemical reaction between a metal and its presence in the environment, this reaction may cause such material properties Reduced.

NOTE: In this standard, the raceway red rust or corrosion spots defined in the bearing outer ring. If the stain is still visible under the metal surface, the stain in this standard does not recognize as is corrosion, and should be ignored.

4 Summary

The new cleaning net coated with grease sample bearing a slight load operation under $60s \pm 3s$ thrust, as the grease in actual use distributed. Bearing storage $48h \pm 0.5h$ at $52\text{ }^{\circ}\text{C} \pm 1\text{ }^{\circ}\text{C}$ and 100% relative humidity, and then clean and inspect the bearing outer ring raceway Signs of corrosion.

5 Significance and Uses

This test method can be used to distinguish between different grease under the test conditions, the relative corrosion resistance.

6 Instruments

6.1

Bearings. the LM11949 and LM11910 bearing cone bearing outer ring.

6.2

motor. speed is $1450\text{r/min} \pm 50\text{r/min}$ or $1750\text{r/min} \pm 50\text{r/min}$, 50W (minimum).