

Railway applications — Axleboxes — Lubricating greases

ICS 45.040; 75.100

National foreword

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The start and finish of text introduced or altered by amendment is indicated in the text by tags. Tags indicating changes to CEN text carry the number of the CEN amendment. For example, text altered by CEN amendment A1 is indicated by **A1** **A1**.

The UK participation in its preparation was entrusted by Technical Committee RAE/3, Railway rolling stock material, to Subcommittee RAE/3/-/2, Rolling bearings and lubricants.

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English Version

Railway applications - Axleboxes - Lubricating greases

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lubrification

Bahnanwendungen - Radsatzlager - Schmierfette

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Foreword

This document (EN 12081:2007+A1:2010) has been prepared by Technical Committee CEN/TC 256 “Railway applications”, the secretariat of which is held by DIN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by April 2011, and conflicting national standards shall be withdrawn at the latest by April 2011.

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This document includes Amendment 1, approved by CEN on 2010-09-14.

This document supersedes A1 EN 12081:2007 A1.

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A1 This document has been prepared under a mandate given to CEN/CENELEC/ETSI by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive 2008/57/EC.

For relationship with EU Directive 2008/57/EC, see informative Annex ZA, which is an integral part of this document. A1

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Introduction

This European Standard has been drawn up with the purpose to define the minimum requirements of greases used for the lubrication of rolling bearings in railway axleboxes. The purpose is to ensure a certain performance level in the interest of operating safety in international traffic. Performance implies a certain quality level of the vehicle running gear, which every railway undertaking may require, notably by imposing procedures in approval and quality assurance for the supply of axleboxes.

Lubricating greases intended for use in axlebox bearing application need to fulfil the requirements of this European Standard, complying with Table A.1. Additional requirements for high speed or specific bearing types, environment or operating conditions are detailed in Table B.1.

This specification has been written so that it reflects the typical performance of e.g. a NLGI grade 2 simple lithium soap grease, based on a mineral oil with a base oil viscosity of 100 mm²/s at 40 °C such as would be found in current use. However, this specification needs to not restrict or limit grease evolution for more demanding applications of today and in the future, hence several parameters are left open for agreement. For example, the base oil viscosity can be reduced for high speed applications, and where sealed bearing units are being used the grease grade may need to be lower.