International Standard

ISO 8068

Third edition
2024-04

Lubricants, industrial oils and related products (class L) — Family T (Turbines) — Specifications for lubricating oils for turbines

Lubrifiants, huiles industrielles et produits connexes (classe L) — Famille T (Turbines) — Spécifications pour les huiles lubrifiantes pour turbines

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Foreword

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This document was prepared by Technical Committee ISO/TC 28, *Petroleum and related products, fuels and lubricants from natural or synthetic sources*, Subcommittee SC 4, *Classifications and specifications*.

This third edition cancels and replaces the second edition (ISO 8068:2006), which has been technically revised. It also incorporates the Amendment ISO 8068:2006/Amd 1:2019.

The main changes are as follows:

— updating of the environmental requirements for environmentally acceptable products;

— introduction of steam demulsibility for steam and combined cycle single shaft turbine grades;

— precision with respect to the stage of the filterability tests, wet and dry;

— addition of new viscosity grades for TGCH and THCH categories;

— addition of an EP category for TGCH.

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Introduction

New requirements for steam and gas turbine lubricants have arisen from technological changes including the increased efficiency of turbines, more severe operating conditions (cycling, peaking duty) and the increased use of alternative fuels. In addition, the simultaneous operation of gas and steam turbines with the same lubrication circuit means that lubricants are expected to satisfy the requirements for both steam and gas turbine lubrication.

The growing concern over environmental protection has led to the use of lubricants that show minimum toxicity towards flora and fauna. Lubricants used in hydraulic power plants, showing risks of leakage either on surface or ground water, are of particular concern. Therefore, minimum aquatic toxicity is required for these lubricants. In addition, biodegradability is desired to respect the ecosystem.