# TECHNICAL REPORT

# **CEN/TR 15367-1**

# RAPPORT TECHNIQUE

# TECHNISCHER BERICHT

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#### **English Version**

# Petroleum products - Guide for good housekeeping - Part 1: Automotive diesel fuels

Produits pétroliers - Guide pour une bonne maîtrise de la qualité du produit - Partie 1 : Carburants diesels pour automobiles (Gazoles)

Mineralölprodukte - Leitfaden für eine gute Systemwartung - Teil 1: Dieselkraftstoffe für Kraftfahrzeuge

This Technical Report was approved by CEN on 13 February 2007. It has been drawn up by the Technical Committee CEN/TC 19.

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EUROPEAN COMMITTEE FOR STANDARDIZATION COMITÉ EUROPÉEN DE NORMALISATION EUROPÄISCHES KOMITEE FÜR NORMUNG

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### **Foreword**

This document (CEN/TR 15367-1:2007) has been prepared by Technical Committee CEN/TC 19 "Gaseous and liquid fuels", the secretariat of which is held by NEN.

This document supersedes CEN/TR 15367:2006.

For further information on any updates, see the Introduction to this document.

CEN/TR 15367 consists of the following parts, under the general title *Petroleum products - Guidelines for good housekeeping*:

- Part 1: Automotive diesel fuels
- Part 2: Automotive petrol fuels

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Occupant of the control of the cont This part of this standard describes the distribution of automotive fuels in general and diesel in specific detail. For guidance concerning petrol distribution, part 2 is published to specifically address ethanol.

### Introduction

During its meeting held in Cannes on June 27 2003, WG 24 "Specification for Automotive diesel" decided that a guidance document on good housekeeping could be instrumental in preventing potential motoring problems caused by contamination in the supply chain. This was endorsed by CEN/TC 19 resolution 24.5 and resulted in an effective publication of the first Technical Report in March 2006.

When a similar guideline for petrol was being drafted, it was decided to link these two. The best option was to publish them as separate parts of the same CEN document, which is achieved by revising the original CEN/TR 15367:2006 *Petroleum products* — *Automotive Diesel Fuels* — *Guide for good housekeeping* as part 1 (effectively this document). Apart from some harmonization of wording no changes have been incorporated.

The work on both documents has been carried out with support from Concawe.

Automotive fuel specifications generally apply at the point of delivery to the customer. To ensure the quality at this point, the best practice is to make sure that the product meets specification when it is dispatched from the refinery and to have systems in place to ensure that it cannot go off-specification on its way to the customer. There will be more than one method or procedure to handle many of the potential contamination issues throughout the distribution chain, thus the advice in this document outlines principles to apply, but does not i all the dis. specify the precise detail of the methods to be adopted in all cases. Nevertheless, it is strongly recommended that all the procedures or measures to be applied along the distribution chain should be defined using a Total Quality Assurance methodology.

#### 1 Scope

This document provides general guidance on diesel fuel housekeeping. It does not pre-empt national or local regulations but addresses the issues of contamination by water or sediment that may occur in the supply chain during manufacture, storage and/or transportation. It does not address contamination by other products nor does it address possible contamination by water or sediment that may occur on board of vehicles, however, an informative note on vehicle factors is presented in Annex A.

#### 2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 590, Automotive fuels - Diesel - Requirements and test methods

## 3 Supply chain definition

For the purposes of this document, the supply chain is considered to consist of the following four parts:

- refineries.
- terminals.
- filling stations (including retail and industrial customer sites), and
- transportation from refineries to terminals and from terminals to filling stations.

Information on useful additives beyond the supply chain is given in Annex B.

#### 4 Potential sources of water and sediment in the supply chain

#### 4.1 Water

Water may enter the product at various stages of the supply chain but only becomes an issue if it is present as free water, which can be a contributory cause of corrosion and biological contamination. Entry points include:

- a) **as dissolved water** during manufacturing; this may become free water further down the supply chain depending on ambient conditions if the product is cooled so much that it reaches saturation point;
- b) as free water due to ingress as a result of e.g. heavy rainfall or through cracks in equipment;
- as water vapour (moist air) through vents followed by cooling/condensation on tank walls, including the vehicle tanks;

As it is virtually impossible to stop water from entering the supply chain, proper water management is essential.

#### 4.2 Sediment

Sediment may consist of rust, dirt, dust, oxidation products and biological growth. These may form over a long period of time.