

ICS 75.160.20; 75.200; 03.100.50

English Version

**Petroleum products - Guide for good housekeeping - Part 3:  
Prevention of cross contamination**

Produits pétroliers - Guide pour une bonne maîtrise de la  
qualité du produit - Partie 3 : Prévention des  
contaminations croisées

Mineralölerzeugnisse - Leitfaden für eine gute  
Systemwartung - Teil 3 : Vermeidung der gegenseitigen  
Verunreinigung

This Technical Report was approved by CEN on 15 December 2008. It has been drawn up by the Technical Committee CEN/TC 19.

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## Foreword

This document (CEN/TR 15367-3:2009) has been prepared by Technical Committee CEN/TC 19 “Gaseous and liquid fuels, lubricants and related products of petroleum, synthetic or biological origin”, the secretariat of which is held by NEN.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

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

- *Part 1: Automotive diesel fuels;*
- *Part 2: Automotive petrol fuels;*
- *Part 3: Prevention of cross contamination.*

This part of this Technical Report describes the control of potential sources of contamination of one fuel type by usually small amounts of a different fuel type that was previously transported. For guidance concerning diesel distribution, Part 1 is published to specifically address biodiesel or FAME (according to EN 14214). For guidance concerning distribution of petrol and ethanol (as specified by EN 15376) in specific detail, Part 2 is published.

## Introduction

At its meeting in Naantali, Finland, on the 30<sup>th</sup> November 2006, CEN/TC 19/WG 21 agreed to adopt the Work Item titled "Fuels supply chain – Guide for preventing cross contamination between petrol and diesel" on its Work Programme with the intention to begin work on a CEN Technical Report in 2007. This resulted from the report of an internal TF that had investigated detection and prevention of the occurrence of high boiling components in petrol and its relation to occurrence of some increased oil dilution problems in bench testing of gasoline engines.

This work has been carried out with support from CONCAWE<sup>1)</sup>.

Automotive fuel specifications generally apply at the point of sale to the final customer. To ensure fuel quality at this point in the supply chain, the best practice is to ensure that the product meets specification when it is dispatched from the refinery or terminal (if final blending takes place at the terminal) and to have quality systems in place to ensure that the fuel product does not become contaminated on its way to the final customer. There will typically be more than one method or procedure to control potential sources of contamination throughout the supply chain. For this reason, this document outlines the principles to apply but does not necessarily specify the precise detail of the methods to be adopted in all cases. Nevertheless, it is strongly recommended that all of the procedures or measures to be applied along the supply chain should be defined using a Total Quality Assurance methodology.

Although the term "cross contamination" can suggest the contamination of one fuel by another of the same type, "cross contamination" is used in this Technical Report in a more general sense, that is, the contamination of one fuel type by usually small amounts of a different fuel type that was previously stored, loaded, blended, or transported in the same container, tank, or vessel.

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1) CONCAWE is the oil companies' European association for Environment, Health and Safety in refining and distribution.

## 1 Scope

This document provides general guidance on automotive fuel handling. It does not pre-empt national or local regulations. It only addresses the issue of cross contamination between petrol and diesel automotive fuels that may occur in the supply chain, during manufacturing, storage, transportation or distribution. There may also be a risk of contamination with other products such as kerosene/jet fuel and off road diesel. The guidance principles described in this document would apply equally to managing these risks although some details may be different.

## 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.

NOTE This Technical Report incorporates provisions from other publications based on undated references. These normative references are cited at the appropriate places in the text and the publications are listed in the Bibliography.

EN 228, *Automotive fuels – Unleaded petrol – Requirements and test methods*

EN 590, *Automotive fuels – Diesel – Requirements and test methods*

EN 14214, *Automotive Fuels – Fatty acid methyl esters (FAME) for diesel engines – Requirements and test methods*

EN 15376, *Automotive fuels – Ethanol as a blending component for petrol – Requirements and test methods*