

# Guidance for a product identification system for petroleum products and other fuels

7th edition

GUIDANCE FOR A PRODUCT IDENTIFICATION SYSTEM  
FOR PETROLEUM PRODUCTS AND OTHER FUELS

7th edition

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## FOREWORD

The *Guidance for a product identification system for petroleum products* has been developed by the Energy Institute's (EI) Distribution and Marketing Safety Committee. It describes a product identification system comprising tapes, stencils, tags or signs that should be applied in the United Kingdom (UK) for marking equipment used in the storage and handling of petroleum products downstream from refinery process plants.

The guidance aims to promote consistency in the identification of petroleum products and to help prevent cross-overs or contamination during the movement of fuels through the distribution network. Product identifiers are also important for health and safety reasons to ensure that for any work done on or near distribution equipment the appropriate precautions are in place.

The product identification system provides a basis for meeting the substance labelling and marking requirements of the *Health and safety (safety signs and signals) regulations* 1996 and the *Dangerous substances and explosive atmospheres regulations* 2002.

The information contained in this publication is provided as guidance only and while every reasonable care has been taken to ensure the accuracy of its contents, the EI cannot accept any responsibility for any action taken, or not taken, on the basis of this information. The EI shall not be liable to any person for any loss or damage which may arise from the use of any of the information contained in any of its publications.

Suggested revisions are invited and should be sent to the Technical Department, Energy Institute, 61 New Cavendish Street, London, W1G 7AR, e: [technical@energyinst.org](mailto:technical@energyinst.org)

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Stuart Walker	ExxonMobil
John Wormald	Total UK

Technical editing and project coordination were carried out by Toni Needham (EI).

## KEY TECHNICAL CHANGES

This is the seventh edition of this EI guidance. Changes have been made to the sixth edition, which was published in 2008, to account for changes to the Fuels Quality Directive (FQD) EC Directive 98/70/EC (as amended), implemented in the UK by the *Motor Fuel (composition and content) regulations* 1999 and subsequent amendments, and the Renewable Energy Directive (RED), EC Directive 2009/28/EC, implemented in the UK by the *Renewable transport fuel obligations order* 2007 and subsequent amendments. Specifically, the changes in this edition are to:

- clarify the status of the publication;
- remove the identifiers which are no longer applicable as a result of the petroleum product quality specification;
- introduce a new identifier for low sulfur gas oil with less than 10 parts per million (ppm);
- introduce a new identifier for reformulated blendstock for oxygenate blending (BOB<sup>1</sup>), and
- introduce a new identifier for furnace flame (furnace flame is a blend of fuel products including gasoil and kerosine).

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<sup>1</sup> Reformulated blendstock for oxygenate blending is known as BOB or RBOB.

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# 1 INTRODUCTION, SCOPE AND STATUS OF PUBLICATION

## 1.1 INTRODUCTION

During the handling of petroleum products there is a risk of confusion between different petroleum products and their grades, which could result in contamination. This will lead to costs associated with uplift of the product and its downgrading, blending or reprocessing. In an extreme case, contaminated product could ultimately reach the user, which could have safety implications. The greatest risk of crossover occurs at product transfer points during the loading and unloading of road tankers.

It is also important for health and safety reasons to ensure that correct and unambiguous identification is used on all pertinent equipment (e.g. storage tanks, pipelines, pumps, loading arms, hoses and road tanker bottom loading adaptor etc.). This enables personnel who have to handle products to take the correct precautions, for example to wear the correct personal protective equipment (PPE) to prevent exposure or injury.

The purpose of this guidance is to provide a standard method for correctly and unambiguously identifying pertinent equipment according to the products handled, in order to help prevent crossovers and consequent contamination of product (which could expose companies to liabilities) and exposure or injury to personnel. Although this guidance highlights the identification of equipment at road tanker loading and unloading points as the priority, the product identification system should also be applied to the equipment described in 1.2. Particular vigilance in its application is required at facilities such as multiproduct tank farms (storing and handling non-petroleum products), where other product identification systems may also be in use.

## 1.2 SCOPE

The product identification system covers all mainstream petroleum products, including biofuels, except:

- aviation fuels, which are covered by API/EI 1542: *Identification markings for dedicated aviation fuel manufacturing and distribution facilities, airport storage and mobile fuelling equipment*;
- lubricating oils;
- liquefied petroleum gases (LPG), and
- liquefied natural gas (LNG).

This guidance should be applied to all pertinent equipment used in the storage and handling of petroleum products downstream from refinery process plants in the UK (e.g. storage tanks, pipelines, pumps, loading arms, hoses and road tanker bottom loading adaptors etc.). This guidance excludes dispenser hoses at filling stations.