Irish Standard
I.S. 251:2012

Gas oil – Requirements and test methods

I.S. 251:2012

Incorporating amendments/corrigenda/National Annexes issued since publication:

The National Standards Authority of Ireland (NSAI) produces the following categories of formal documents:

I.S. xxx: Irish Standard – national specification based on the consensus of an expert panel and subject to public consultation.

S.R. xxx: Standard Recommendation - recommendation based on the consensus of an expert panel and subject to public consultation.

SWiFT xxx: A rapidly developed recommendatory document based on the consensus of the participants of an NSAI workshop.

This document replaces:	*This document is based on:*	*Published:*
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Údarás um Chaighdeáin Náisiúnta na hÉireann

DECLARATION

OF

SPECIFICATION

ENTITLED

GAS OIL – REQUIREMENTS AND TEST METHODS

AS

THE IRISH STANDARD SPECIFICATION FOR

GAS OIL – REQUIREMENTS AND TEST METHODS

NSAI in exercise of the power conferred by section 16 (5) of the National Standards Authority of Ireland Act, 1996 (No. 28 of 1996) and with the consent of the Minister for Jobs, Enterprise and Innovation, hereby declare as follows:

1. This instrument may be cited as the Standard Specification (Gas oil – Requirements and test methods) Declaration, 2012.

2. (1) The Specification set forth in the Schedule to this declaration is hereby declared to be the standard specification for Gas oil – Requirements and test methods.

(2) The said standard specification may be cited as Irish Standard 251:2012 or as I.S. 251:2012.

3. (1) The Standard Specification (Marked gas oil) Declaration 2006 is hereby revoked.

(2) Reference in any other standard specification to the Instrument hereby revoked and to Irish Standard 251:2006 thereby prescribed, shall be construed, respectively, as references to this Instrument and to Irish Standard 251:2012.

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Foreword

This Irish Standard has been revised by an Ad Hoc Working Group established by NSAI and comprising representatives from the Irish petroleum industry. The secretariat for the Ad Hoc Working Group was held by NSAI.

I.S. 251 has been revised following a request to NSAI from representatives of the Irish Petroleum Industry Association.

This Irish Standard makes provision for the requirements introduced by The Fuels Quality Directive 2009/30/EC whereby the sulfur content of gas oil used in off-road vehicles conforms to a sulfur-free description.

The principal differences between I.S. 251:2006 and this document are:

a) the title of the standard is changed,

b) the scope of the standard is widened to introduce two classes of gas oil,

c) normative references are updated,

d) inclusion of up to 7 % (V/V) of Fatty Acid Methyl Esters (FAME) conforming to the appropriate Irish Standard is permitted,

e) characteristics of gas oil for off-road vehicles are defined,

f) characteristics of gas oil for stationary applications are introduced,

g) the sulfur content of gas oil for off-road vehicles is reduced to 10 mg/kg,

h) seasonality requirements are changed,

i) cetane index, particulate matter and oxidation stability tests are introduced,

j) the test method for strong acid number is changed, and

k) bibliography is updated.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

Compliance with an Irish Standard does not of itself confer immunity from legal obligations.

In line with international standards the decimal point is shown as a comma (,) throughout this document.

SCHEDULE

Gas oil – Requirements and test methods

1 Scope

This Irish Standard introduces requirements for two classes of summer and winter grade gas oil. Class A2 gas oil is suitable for use in diesel engines used in agricultural equipment, trains and off-road vehicles while Class D is suitable for use in domestic, commercial and industrial heating systems as well as stationary internal combustion plant.

Gas oil is defined as petroleum distillate, intermediate in character between kerosene and light lubricating oil.

NOTE Gas oil for use in marine applications should meet the requirements in ISO 8217.

2 Normative references

This Irish Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references subsequent amendments to or revisions of any of these publications apply to this Irish Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

I.S. EN 116, *Diesel and domestic heating fuels – Determination of cold filter plugging point*

I.S. EN 14078, *Liquid petroleum products – Determination of fatty acid methyl ester (FAME) content in middle distillates – Infrared spectrometry method*

I.S. EN 14213, *Heating fuels – Fatty acid methyl esters (FAME) – Requirements and test methods*

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

I.S. EN 14275, *Automotive fuels - Assessment of petrol and diesel fuel quality - Sampling from retail site pumps and commercial site fuel dispensers*

I.S. EN 15751, *Automotive fuels - Fatty acid methyl ester (fame) fuel and blends with diesel fuel - Determination of oxidation stability by accelerated oxidation method*

I.S. EN ISO 2160, *Petroleum products – Corrosiveness to copper – Copper strip test*

I.S. EN ISO 2719, *Determination of flash point – Pensky-Martens closed cup method*

I.S. EN ISO 3104, *Petroleum products – Transparent and opaque liquids – Determination of kinematic viscosity and calculation of dynamic viscosity*

I.S. EN ISO 3170, *Petroleum liquids – Manual sampling*

I.S. EN ISO 3171, *Petroleum liquids – Automatic pipeline sampling*

I.S. EN ISO 3405, *Petroleum products – Determination of distillation characteristics at atmospheric pressure*

I.S. EN ISO 3675, *Crude petroleum and liquid petroleum products – Laboratory determination of density – Hydrometer method*