AS 2649—2007

Australian Standard®

Petroleum liquids and liquefied petroleum gases—Measurement—Standard reference conditions

This Australian Standard® was prepared by Committee ME-049, Oil and Gas Measurement. It was approved on behalf of the Council of Standards Australia on 14 November 2007. This Standard was published on 14 December 2007.

The following are represented on Committee ME-049:

- Australian Institute of Petroleum
- Australian Institute of Physics
- Australian Petroleum Production and Exploration Association
- Institute of Instrumentation, Control and Automation, Australia
- LPG Australia
- National Association of Testing Authorities, Australia
- National Measurement Institute

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PREFACE

This Standard was prepared by the Standards Australia Committee ME-049, Oil and Gas Measurement, to supersede AS 2649—1983, *Petroleum liquids and gases—Measurement—Standard reference conditions*. It is identical with, and has been reproduced from ISO 5024:1999, *Petroleum liquids and liquefied petroleum gases—Measurement—Standard reference conditions*.

The objective of this standard is to provide standard reference conditions of pressure and temperature for the measurement of liquid and gaseous petroleum products.

As this Standard is reproduced from an international standard, the following applies:

(a) Its number appears on the cover and title page while the international standard number appears only on the cover.

(b) In the source text ‘this International Standard’ should read ‘this Australian Standard’.

(c) A full point substitutes for a comma when referring to a decimal marker.

INTRODUCTION

Most custody transfers of crude petroleum and its products are transacted in volumetric quantities. Since crude oils and petroleum products have relatively high coefficients of thermal expansion and compressibility, volumes are corrected to standard conditions of temperature and pressure in order to provide a meaningful and consistent basis for measurement. The definition of standard reference conditions is therefore of fundamental importance in measurement, calculation and accounting of petroleum quantities.

At the time of publication of this International Standard, reference conditions for crude petroleum and its products at 20 °C and 60 °F are still in use in some countries.

It is hoped that the worldwide trend to the exclusive use of the International System of Units (SI) will ultimately establish a single uniform set of standard reference conditions which will further simplify the requirements of world trade and commerce.