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Petroleum and liquid petroleum products — Temperature measurements — Manual methods

Pétrole et produits pétroliers liquides — Mesurages de la température — Méthodes manuelles

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Foreword

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International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 3.

Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this International Standard may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

International Standard ISO 4268 was prepared by Technical Committee ISO/TC 28, *Petroleum products and lubricants*, Subcommittee SC 3, *Static petroleum measurement*.

Introduction

In all calculations concerned with the measurement of bulk quantities of petroleum and petroleum products, whether in terms of volume at standard temperature or in terms of mass or apparent mass-in-air, a knowledge of the mean temperature of the oil is required. The following recommendations for the determination of the temperature of the contents of storage tanks, including tanks carried by road and rail vehicles and compartments of barges and ships, are designed to provide the most reliable measurement of the mean temperature under the given conditions.

It cannot be too strongly emphasized that errors in temperature measurement can account for the larger part of the total error in quantitative measurement of petroleum and liquid petroleum products, and great care is therefore needed in the selection and use of temperature-measuring equipment. The methods specified should be followed in scrupulous detail if the final measurement is to have the smallest possible uncertainty.

Gaugers employed in temperature measurement should be fully trained and instructed in the application of the procedures of this International Standard. They should be instructed to report any deviations that are unavoidable.