

Significance of ASTM Tests
for
Petroleum Products



*Prepared by ASTM Committee D-2
on Petroleum Products and Lubricants*

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AMERICAN SOCIETY FOR TESTING AND MATERIALS
1916 Race St., Philadelphia, Pa. 19103

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FOREWORD

This third edition of *Significance of ASTM Tests for Petroleum Products* was prepared under the auspices of ASTM Committee D-2 on Petroleum Products and Lubricants. Ideas and material for its compilation were solicited from the entire committee, and from the chairmen and members of its many technical committees, divisions, and sections.

Drafts of the book were then reviewed by a special editorial committee of experts in the various fields covered. A final draft was submitted to the entire membership of Committee D-2.

Much credit is due the members of the editorial committee for their careful work. Acknowledgment is also made to the companies and laboratories with which the members of Committee D-2 and its many subdivisions are associated. Their cooperation in making available the services of their representatives has made possible the preparation of this book.

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INTRODUCTION

This third edition of *Significance of ASTM Tests for Petroleum Products* has been prepared for the reader who wishes to acquire a general idea of the significance of the various ASTM Methods of Test under the jurisdiction of Committee D-2 that relate to petroleum products. A brief outline of these methods of test and their relation to the performance characteristics of specific products is also discussed, so that the reader may have some idea of the applications of the various methods. This book covers only the methods of test that apply to petroleum products, including lubricants and crude petroleum. The language has been kept relatively free of technical terms for those who may not be acquainted with such terms.

In a treatise, covering so many test methods that are applicable to so many products, it is impossible to discuss or even mention all of the applications of these methods and their significance in predicting performance characteristics. In many cases there are valid differences of opinion as to the interpretation of laboratory test data in terms of performance. Newly designed equipment, new methods of operation and maintenance may require new petroleum products that require new laboratory methods of test. For these reasons, discussion herein must of necessity be brief and of a general nature.

The outlines of the methods of test in this book are not adequate for conducting tests. Full details and the necessary safety precautions required for each method are given in the following publications:

ASTM Standards on Petroleum Products and Lubricants
ASTM Manual on Measurement and Sampling of Petroleum and
Petroleum Products
ASTM Manuals of Engine Test Methods for Rating Fuels
Book of ASTM Standards, Part 5

Each Standard has a permanent designation number, with a suffix to indicate the year of publication or latest revision. These dating suffixes have been omitted in this book because significance of the methods does not change when minor test details are revised from year to year.

When necessary for good readability and context, the methods of test within a chapter are further subdivided and discussed either singly or by groups.

