# Petroleum & Petroleum Products Technology Handbook (Thermal Cracking of Pure Saturated Hydrocarbons, Petroleum Asphalts, Refinery Products, Blending and Compounding, Oil Refining and Residual Fuel Oils)

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**Engineers** 

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SERVICES

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Petroleum asphalt is a sticky, black and highly viscous liquid or semi-solid that is present in most petroleum crude oils and in some natural deposits. Petroleum crude oil is a complex mixture of a great many different hydrocarbons. Refined petroleum products are derived from crude oils through processes such as catalytic cracking and fractional distillation. Refining is a necessary step before oil can be burned as fuel or used to create end products. Residual fuel oil is a complex mixture of hydrocarbons prepared by blending a residuum component with a flux stock which is a distillate component diluent, to give the desired viscosity of the fuel oil produced. Petroleum refining is the process of separating the many compoundspresent in crude petroleum. An Oil refinery or petroleum refinery is an industrial process plant wherecrude oil is processed and refined into more useful products The global Petroleum Asphalt market is valued at USD 48.8 Billion in 2017 and is expected to reach USD 77.67 Billion by the end of 2024, growing at a Growth Rate of 6.87% between 2017 and 2024. The global bunker fuel market was valued at \$137,215.5 million in 2017 and is expected to reach \$273,050.4 million by 2025, registering a CAGR of 9.4% from 2018 to 2025. Some of the fundamentals of the book are composition of radiation effects on lubricants, thermal cracking of pure saturated hydrocarbons, petroleum asphalts, refinery products, refinery feedstocks, blending and compounding, oil refining, residual fuel oils, distillate heating oils, formulations of petroleum, photographs of machinery withsuppliers contact details. A total guide to manufacturing and entrepreneurial success in one of today's most lucrative petroleum industry. This book is one-stop guide to one of the fastest growing sectors of the petroleum industry, where opportunities abound for manufacturers, retailers, and entrepreneurs. This is the only complete handbook on the commercial production of petroleum products. It serves up a feast of how-to information, from concept to purchasing equipment.

1. RADIATION EFFECTS ON LUBRICANTS Introduction Interaction of Radiation with Organic Matter General Physical Effects of Radiolysis Base Oils The Radiation Environment

Hydrocarbons (Petroleum Oils)

**Alkylaromatics** 

**Ethers** 

Esters

**Silicones** 

Halogenated Compounds

Additives

**Radiation Damage Inhibitors** 

**Antioxidants** 

Viscosity Index Improvers

**Antiwear Additives** 

Extreme Pressure (EP) Agents

Foam Inhibitors

**Rust Inhibitors** 

**Environmental Factors** 

Effects of Radiation Type and Intensity

Role of Temperature

Influence of Oxygen

Oil Lubricants

General: Commerical formulations

Based on Alkylaromatic Fluids

Fluids Based on Poly (phenyl ethers)

Steam Turbine Oils

Aircraft Turbine Oils

Hydraulic Fluids

**Lubricating Greases** 

**Gelling Agents** 

**CONTENTS** 

Base Oils

**Commerical Greases** 

Greases of Enhanced Radiation Resistance

**Dynamic Tests** 

**Principles** 

### 2. THERMAL CRACKING OF PURE SATURATED

**HYDROCARBONS 65-102** 

Introduction

**Experimental Methods** 

**Batch Reactors** 

Flow Reactors

Residence Time

Volume Change on Reaction

Kinetics of the Cracking Process

Rates of Decomposition

Straight Chain Paraffins

Correlation of the Rate Constants for n-Paraffins

Effect of Branching on the Rate of Decomposition

Effect of Pressure on the Decomposition of Paraffinic

**Hydrocarbons** 

Rates of Decomposition-Saturated Cyclic Hydrocarbons

Estimation of Rate Constant of Decomposition

**APPENDIX** 

Calculation of Product Distribution from Paraffin Cracking by the Rice-Kossiakoff Method.

### 3. PETROLEUM ASPHALTS

Chemical and Physical Composition
Possible Structures of the Nuclei in Resins and Asphaltenes
Manufacture of Asphalt from Petroleum
uses of Asphalts

### 4. REFINERY PRODUCTS

Low-boiling Products

Gasoline

**Gasoline Specifications** 

Distillate Fuels

Jet and Turbine Fuels

**Automotive Diesel Fuels** 

Railroad Diesel Fuels

**Heating Oils** 

Residual Fuel Oils

#### 5. REFINERY FEEDSTOCKS

**Crude Oil Properties** 

- 1. API Gravity
- 2. Sulfur Content, Wt%
- 3. Pour Point, °F (°C)
- 4. Carbon Residue, Wt%
- 5. Salt Content, 1lb/1000 bbl
- 6. Characterization Factors
- 7. Nitrogen Content, Wt%
- 8. Distilation Range
- 9. Metals Content, ppm
- 10. Total Acid Number

Composition of Petroleum

- 1. Paraffins
- 2. Olefins
- 3. Naphthenes (Cycloparaffins)
- 4. Aromatics

Crudes Suitable for Asphalt Manufacture

Crude Distillation Curves

**Problems** 

#### 6. BLENDING AND COMPOUNDING

### 7. OIL REFINING

Introduction

General Aspects of Oil Refining

Crude Oils and Products

Crude Oil Constituents

Classification of Crude Oils

Oil Products

- 1. Gas Fuels
- 2. Liquid Fuels

**Nonfuel Applications** 

Oil Refining Processes

Crude Oil Distillation

Atmospheric Distillation

Vacuum Distillation

Crude Oil Desalting

Catalytic Cracking (Cat Cracking)

Hydrotreating

Distillate Hydrotreating

Pyrolysis Gasoline Hydrotreating

Desulfurizing by Adsorption

Catalytic Reforming

Introduction

Semiregenerative Reformer

Fully Regenerative Reformer

Continuously Regenerative Reformer

Hydrocracking

Residue Conversation Process Introduction

Fundamentals of Residue Conversion and Process Options

Hydrogen Addition ("H-in") Processes

Residue Hydrotreating (Demetallization, Desulfurization,

Denitrification)

Residue Hydrocracking (Hydroconversion)

Carbon Rejection ("C-out") Processes

Thermal Processes (Visbreaking, Coking)

Catalytic Processes (Residue Cat Cracking)

Other Processes

**Extraction of Asphaltenes** 

**Partial Oxidation** 

**Process Combinations** 

**Gasoline Upgrading Processes** 

- 1. Alkylation
- 2. Polymerization
- 3. Isomerization
- 4. Production of Ethers (MTBE, ETBE)

Other Processes

**Gas Treating** 

Sulfur Recovery

Catalysts

**Environmental Protection in Oil Refining** 

Introduction

Manufacturing Emissions

**Hydrocarbons** 

Hydrocarbons in Air

Hydrocarbons in Wastewater

Hydrocarbons in Soil and Groundwater

Sulfur and Nitrogen Compounds

Sulfur Compounds

Nitrogen Compounds

Consumer Related Emissions

**Transportation Fuels** 

Motor Gasoline

Diesel Fuel

Marine Fules

**Fuels for Heat Generation** 

Cost of Environmental Conservation Integrated Refinery Models Trends of Refinery Structures Hydroskimming Refinery **Conversion Concepts** Cat Cracking – Visbreaking Refinery

Hydrocraking- Cat Cracking Refinery Hydrocracking - Coking Refinery Integration of Existing Refineries

Corrosion and Materials

Testing and Analysis

Crude Oil and Product Properties

**Testing Methods and Standards** 

Storage and Transport

### 8. RESIDUAL FUEL OILS

History

Specifications For Residual Fuels

Fluidity

Thermal Stability

**Explosiveness** 

Pacific Specifications for Fuel Oils

**Detailed Inspections of Heavy Fuels** 

End uses of Residual Fuel Oils

Steam Boilers

**Industrial Applications** 

**Diesel Engines** 

**Gas Turbines** 

Gas-enrichment Oils

Problems Associated with Utilization

Sulfur in Residual Fuel Oils

Ash Possible Source of Contaminants

Soot and Carbon Particles

Instability and Incompatibility

The Combustion of Residual Fuels

**Heating Value** 

Chemistry of Combustion

Flue-gas Analysis

Humidity in Air and Flue Gases

Heat Content of Flue Gases

Specific Heat of Fuel Oils

Residual Fuel Oil Burners

## 9. DISTILLATE HEATING OILS

Status of the Heating-Oil Industry

Burners, Controls and Tanks

Central-Heating Systems

**Burning Qualities in Oils** 

Stability in Heating Oils

Handling and Delivery

10. FORMULATIONS OF PETROLEUM

### 11. PHOTOGRAPHS OF MACHINERY WITH SUPPLIERS CONTACT DETAILS

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