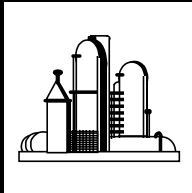
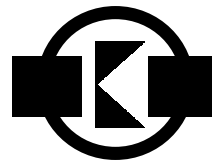


**ANNOUNCING**



# GLOBAL OPPORTUNITIES IN FUEL ADDITIVES 1999 TO 2004

**A comprehensive analysis of the  
worldwide fuel additives business,  
focusing on the opportunities arising from changing  
specifications, new fuels and  
engine designs, emerging additive technologies and  
chemistries, and competitive forces**



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GLOBAL OPPORTUNITIES IN FUEL ADDITIVES, 1999 to 2004 is a global multiclient report designed to provide subscribers with an accurate and independent resource to grow their fuel additives business in this competitive and changing environment. It will provide additive suppliers, refiners, terminal and pipeline operators, and others in the fuel supply chain with an excellent resource to build solid, strategic plans and respond to competitive forces, emerging technologies, and evolving market needs. Specifically, the report will assist subscribers in growing their businesses by providing:

- The identification of business opportunities
  - New product development
  - Emerging markets and channels
  - Diversification
- A highly reliable and independent assessment of additive consumption and market shares
- An unbiased appraisal of market trends and emerging technologies and chemistries
- Competitive intelligence for use in benchmarking
- An unfiltered assessment of market trends and business developments

## TENTATIVE OUTLINE

### 1. EXECUTIVE SUMMARY

### 2. INTRODUCTION

- THE GLOBAL BUSINESS -

### 3. GLOBAL BUSINESS ACTIVITY

- Fuel demand
- Additive supply
  - Supply structure
  - Suppliers
  - Regional issues
  - Interregional trade
- Additive demand (volume and value)
  - Fuel type
  - Function class
  - Region
- Market trends
  - Formulations
  - Performance specifications
  - Emissions specifications
  - Engine designs
  - Advanced fuels
  - Others
- Regional similarities and differences
  - Buyers
  - Sellers
  - Market developments
  - Outlook
- Appraisal and outlook
  - Industry uncertainties
  - Demand forecast, 2004
    - Most likely
    - Optimistic
    - Pessimistic

- THE REGIONAL MARKETS -

### 4. NORTH AMERICA

### 5. SOUTH AND CENTRAL AMERICA

### 6. EUROPE

### 7. ASIA PACIFIC

### 8. OTHER REGIONS-a

(Each region featured will include the following)

- Fuel demand
- Additive demand by fuel type
- Additive function class
  - Demand, 1998 and 1999 projections
  - Supply
  - Treat rates and cost
  - Market developments
  - Demand forecast, 2004
  - Business opportunities
- Additive supply
  - Overview
  - Supply structure
  - Additive supply market shares by:
    - Fuel type
    - Function class
  - Rivalry among competitors
  - Outlook
- Market developments
  - Performance specifications
  - Emission specifications
  - Engine designs
  - Advanced fuels
  - Others
- Research and development
  - Additive suppliers
  - Fuel manufacturers and marketers
  - Funding
  - Outlook
- Appraisal and outlook
  - Industry uncertainties
  - Demand forecast, 2004
    - Most likely
    - Optimistic
    - Pessimistic
- Business opportunities
  - By additive function class
  - By fuel type

- THE ADDITIVE PRODUCTS -

### 9. ADDITIVE FUNCTION CLASS

- Antifoamant
- Antimisting
- Anti-icing
- Antiknock/octane boosters-b
- Antioxidant
- Biocide and fungicide
- Cetane improver
- Conductivity improver
- Corrosion inhibitor
- Dehazer/demulsifier
- Detergent/dispersant
- Drag-reducing agent
- Dye
- Lubricity improver
- Metal deactivator
- Odor mask and odorant
- Performance enhancers
- Pour-point depressant
- Smoke suppressant
- Taggant/marker
- Other

- THE SUPPLIERS -

### 10. SUPPLIER PROFILES

- Baker/Petrolite
- BASF
- Betz
- ELF
- Ethyl
- Lubrizol
- Mobil
- Nalco/Exxon Energy
- Octel
- Oronite
- Shell/Paramins
- Texaco
- Unichem
- UOP
- Others

- THE OPPORTUNITIES -

### 11. GLOBAL BUSINESS OPPORTUNITIES

- By fuel type
- By additive function class
- By region

- Includes Africa, the Middle East, and other regions; excludes the CIS.

b- Includes MMT; excludes oxygenates.

# GLOBAL OPPORTUNITIES IN FUEL ADDITIVES 1999 TO 2004

## THE SCOPE

The study will focus specifically on storage and performance additives used in such fuels as motor gasoline, diesel motor fuel, heating oil, aviation fuel, and marine fuel. Base-year data will be presented for 1998, and a projection for 1999 and a forecast for 2004 will be included.

Although the study will include such additives as manganese methylcyclopentadienyl tricarbonyl (MMT) and others used to boost octane, it will specifically exclude such oxygenated blending components as methyl tertiary butyl ether (MTBE) and tertiary butyl alcohol (TBA).

The geographic scope of the study will include the following regions:

- **North America**
- **South and Central America**
- **Europe**
- **Asia Pacific**
- **Others (includes Africa, the Middle East, and other regions; excludes the CIS)**

## THE OBJECTIVE

The study will provide subscribers with an accurate and independent appraisal of market size and segmentation, competitive forces, market developments, and business opportunities in the global fuel additives business.

## THE STUDY

To achieve the objective, **GLOBAL OPPORTUNITIES IN FUEL ADDITIVES, 1999 to 2004** will analyze the market by conducting extensive primary research with fuel additives suppliers, refiners, fuel blenders and marketers, pipeline operators, original equipment manufacturers (OEMs), government agencies, and other industry forces throughout the world.

In addition to presenting market size and segmentation data from this research, the study will be rich in information and insights into additive chemistries, treat rates and costs, competitive intelligence, future trends, and other issues tied to business opportunities and uncertainties. A tentative table of contents for the study is shown on

the previous page.

The study will comprise an estimated 500 pages of material, segmented into eleven chapters. The study will be written in English. Each of the chapters featured in the study is discussed below:

1. **Executive Summary.** This section will provide a concise, executive-style overview of key report findings.
2. **Introduction.** This section will provide important background information to assist subscribers in the efficient and accurate use of the study. It will include information on the report scope and methodology, limitations, definitions, and unit conversions.
3. **Global Business Activity.** This chapter will address the fact that the fuel additives business is truly global and, as such, a consolidated global perspective is critical to building successful business plans. To provide this perspective, this chapter will present a consolidated analysis of global supply and demand issues. The analysis will also include important insights and information that will contrast and compare the additives market in each region of the world. In addition, demand data for 1998, a projection for 1999, and a global forecast of additive demand to the year 2004 will be provided. The forecast will include three demand scenarios: most likely, optimistic, and pessimistic.
4. through 8. **The Regional Markets.** The regional market chapters will provide comprehensive and objective analyses of the fuel additives business in each region of the world. The regional market analyses will comprise the following chapters:
  - **North America**
  - **South and Central America**
  - **Europe**
  - **Asia Pacific**
  - **Others**

A summary of the key sections in each regional chapter follows:

**Fuel demand.** This section will provide the base volumes on which the demand analyses for 1998 and 1999 will be derived. The section will also present data on fuel demand by type and region, and will present a demand forecast for fuel type by region to the year 2004.

**Additive demand by fuel type.** This section will provide an in-depth analysis of additive consumption in the primary types of petroleum-based fuels, including motor gasoline, diesel motor fuel, heating oil, aviation fuels, and marine fuels.

Each fuel type featured in this section will include important information and insights on:

- Formulations
- Treat rates
- Packages and components
- Additives costs
- Additive demand (volume and value)
- Unmet needs
- Suppliers
- Future trends
- Demand forecast, 2004 (volume and value)

**Additive function classes.** This section will examine additive consumption by function class. Function class describes the specific role the additive plays in enhancing the storage and transportation properties of fuels, as well as the fuels' performance, and includes antiknock products, biocides and fungicides, cetane improvers, corrosion inhibitors, detergents, and pour-point depressants, among others.

Market size and segmentation information will represent only part of this section's value. The section will also provide subscribers with valuable insights into business opportunities.

The following is a tentative outline of the issues that will be included for each function class featured in this section:

- Additive demand (volume and value)
  - Product category
  - Chemical class
- Supply
- Treat rates and costs
- Market developments
- Forecast
- Business opportunities

**Additive supply.** This section will provide important information and insights into the supply chain structure and dynamics. In addition, it will provide an analysis of market shares by fuel type and function class. This section will also examine rivalry among competitors, and present a supply-side outlook.

**Market developments.** The fuel additives business is significantly influenced by a number of diverse yet interrelated issues. This section will provide a highly insightful analysis of each of the market developments affecting the quality and quantity of fuel additives consumed in the region. In particular, this section will examine the current and forecast impact of such market developments as:

- Performance specifications
- Emissions specifications
- New engine designs (including developments in exhaust after-treatment technology)
- Advanced fuels (including low-sulfur fuels and alternative fuels)

**Research and development.** Research and development (R&D) activity is expected to become an increasingly challenging issue over the next five years, particularly in the area of funding. This section will look specifically at the current and projected role the additive suppliers and fuel manufacturers and marketers have in fuel additive R&D. In particular, this section will present important insights and information on the types of R&D activity currently being done, who is conducting it, and who is funding it. In addition, this section will examine how R&D activity and funding are expected to evolve over the next five years.

**Appraisal and outlook.** This section will present an objective assessment of most likely, optimistic, and pessimistic forecasts of fuel additive consumption. Each scenario will take into account the impact of such variables as regulatory issues (emissions, fuel economy, and others), equipment technology (hybrids, fuel cells, exhaust after-treatment, and others), consumer trends, and other forces that drive the volume and value of fuel additives produced and consumed over the 1999 to 2004 time frame. In addition, this section will provide an analysis of the business uncertainties driving each scenario.

**Business opportunities.** This section will provide strategically important

insights into opportunities born from emerging markets, new technologies, unmet needs, and competitive forces in each region featured. Other market issues will also be examined. Opportunities will be identified in the following categories:

- Fuel type
- Function class
- Country (if applicable)

**9. Additive Function Class.** This chapter will examine global additive consumption in each additive function class. Insights and information on the following issues will be provided for each function class analyzed (see tentative outline for list of additives analyzed):

- Properties and specifications
- Product designations
- Demand (volume and value) by:
  - Region
  - Chemicals class
- Supply
- Pricing
- Market developments
- Business opportunities
- Outlook
  - Business uncertainties
  - Forecast, 2004

**10. Supplier Profiles.** Understanding the competition is basic to growing your business. This is particularly critical in the fuel additives business, in which sales are concentrated among few suppliers and competition is very intense.

The supplier profiles featured in **GLOBAL OPPORTUNITIES IN FUEL ADDITIVES, 1999 to 2004** will provide subscribers with an excellent resource to sharpen their awareness of the position of suppliers in the marketplace. An estimated 20 additive suppliers will be profiled, including major multinational suppliers and specialty additive manufacturers, as well as selected regional suppliers. The profiles will provide insights into the strengths and weaknesses of the competition, as well as serve as an excellent resource to benchmark your business activity. This awareness can be a powerful tool in developing a solid strategy to enhance your company's competitive superiority.

Each company profile will provide insights and information on the supplier's overall business activity, products and markets, organizational structure, channels of distribution, R&D, and plants and facilities. In addition, the profiles will provide an overall appraisal of the company's position in the marketplace, as well as its future outlook.

#### 11. **Global Business Opportunities.**

Clearly, the most actionable benefits from this study will be derived from the global business opportunities chapter. In addition to presenting an overview of the business opportunities detailed in each of the regional analyses of the report, this chapter will present valuable information and insights into business opportunities that span the global fuel additives business. The chapter will also provide an assessment of business opportunities for each additive function class and fuel type.

## METHODOLOGY

As the leading consultancy on lubricant and fuel additive-related issues, Kline has developed a program based heavily on primary research (field and telephone interviews). The information will be gathered and analyzed by a global team with experience in fuel additives, internal combustion engine technology, R&D, and petroleum products marketing. This approach has a proven track record as being the most effective and reliable in analyzing the fuel additives business, as well as in identifying business opportunities.

**GLOBAL OPPORTUNITIES IN FUEL ADDITIVES, 1999 to 2004** will leverage our contacts in the industry and employ the use of primary research to capture insights and information available from a wide range of industry experts and opinion leaders.

Although primary research by far will be the leading source of information and insights provided in **GLOBAL**

**OPPORTUNITIES IN FUEL ADDITIVES, 1999 to 2004**, the analysis will be supplemented by secondary research. This secondary research will include: (1) a review of suppliers' product literature and price lists; (2) a search of recent trade and technical literature; and (3) an analysis of statistical data from the government, industry, and trade associations and agencies. In addition, we will leverage

information available through Kline & Company's two previous syndicated studies covering fuel additives, as well as several other related multiclient studies.

## SUBSCRIPTION PRIVILEGES AND TENTATIVE SCHEDULE

**GLOBAL OPPORTUNITIES IN FUEL ADDITIVES, 1999 to 2004** is available by subscription only. Each subscriber will receive three copies of the report and be entitled to a one-day post-survey briefing in our offices with members of the study team. This meeting may be taken up to three months after receipt of the report.

If a sufficient number of charter subscribers is received by January 31, 1999, the report will be delivered at the end of the third quarter of 1999.

To subscribe now and take advantage of the charter subscriber benefits listed below, please have an authorized employee sign the enclosed subscription agreement form and return it to our offices before January 31, 1999. We will return a countersigned copy to you promptly.

Charter subscriber benefits. The following benefits will be extended to companies subscribing to this study before January 31, 1999:

- **The opportunity to participate in the planning and development of this study, thereby ensuring that your needs on specific issues will be addressed**
- **A \$5,500 discount off the subscription price**
- **A complimentary copy of AFTERMARKET FUEL ADDITIVES – UNITED STATES, 1999**

## KLINE GROUP CREDENTIALS

Kline & Company, Inc. is the leading business research firm serving the oil, gas, petrochemical, and related chemical-based industries, with principal offices in the United States, Belgium, Japan, Australia, Singapore, China, Mexico, and Brazil. Since its inception in 1959, Kline has completed more than 4,000 proprietary assignments and nearly 150 syndicated studies.

Kline's Petroleum Products Practice leverages more than 60 years of combined experience in the petroleum, fuel, lubricant,

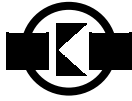
and chemical industries to assist clients in a wide range of proprietary assignments, including:

- **Business appraisals**
- **Competitive intelligence**
- **Market analysis**
- **Mergers and acquisitions**
- **Customer satisfaction**
- **Strategy development**
- **Manufacturing economics**
- **Technology assessment**

Specific to this proposed study, Kline has conducted numerous proprietary assignments in the lubricants additives industry. The company also possesses a substantial database on this industry through several syndicated studies completed by the Petroleum Products Practice and other Kline groups during the last decade, including:

- U.S. SPECIALTY CHEMICALS SERIES, 1995 - 1998
- LUBRICANTS ADDITIVES, 1997
- SPECIALTY BIOCIDES USA, 1996
- A COMPETITIVE ANALYSIS OF THE ORTHEAST FUEL SUPPLY, STORAGE, AND DISTRIBUTION BUSINESS - 1994
- LUBRICANT AND FUEL ADDITIVES, 1994
- METALWORKING FLUIDS USA, 1994
- LUBRICANT AND FUEL ADDITIVES, 1990





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