

# North America Blood Viscometer Market by Manufacturers, Countries, Type and Application, Forecast to 2022

<https://marketpublishers.com/r/N94C6AC5E5AEN.html>

Date: February 2017

Pages: 120

Price: US\$ 4,480.00 (Single User License)

ID: N94C6AC5E5AEN

## Abstracts

Blood Viscometer is an instrument used to measure the viscosity of a fluid. For liquids with viscosities which vary with flow conditions, an instrument called a rheometer is used. Viscometers only measure under one flow condition.

Scope of the Report:

This report focuses on the Blood Viscometer in North America market, especially in United States, Canada and Mexico. This report categorizes the market based on manufacturers, countries, type and application.

Market Segment by Manufacturers, this report covers

Anton Paar

Thermo Fisher Scientific

Brookfield

RheoSense

Health Onvector

?BioFluid Technology

LAUDA

LAMY RHEOLOGY

Benson Viscometers

HRD

Market Segment by Countries, covering

United States

Canada

Mexico

Market Segment by Type, covers

Rotational Viscometer

Capillary Viscometer

Market Segment by Applications, can be divided into

Hospital

Clinic

Laboratory

There are 15 Chapters to deeply display the North America Blood Viscometer market.

Chapter 1, to describe Blood Viscometer Introduction, product type and application, market overview, market analysis by countries, market opportunities, market risk, market driving force;

Chapter 2, to analyze the manufacturers of Blood Viscometer, with profile, main business, news, sales, price, revenue and market share in 2016 and 2017;

Chapter 3, to display the competitive situation among the top manufacturers, with profile, main business, news, sales, price, revenue and market share in 2016 and 2017;

Chapter 4, to show the North America market by countries, covering United States, Canada and Mexico, with sales, revenue and market share of Blood Viscometer, for each country, from 2012 to 2017;

Chapter 5 and 6, to show the market by type and application, with sales, price, revenue, market share and growth rate by type, application, from 2012 to 2017;

Chapter 7, 8 and 9, to analyze the segment market in United States, Canada and Mexico, by manufacturers, type and application, with sales, price, revenue and market share by manufacturers, types and applications;

Chapter 10, Blood Viscometer market forecast, by countries, type and application, with sales, price and revenue, from 2017 to 2022;

Chapter 11, to analyze the manufacturing cost, key raw materials and manufacturing process etc.

Chapter 12, to analyze the industrial chain, sourcing strategy and downstream end users (buyers);

Chapter 13, to describe sales channel, distributors, traders, dealers etc.

Chapter 14 and 15, to describe Blood Viscometer Research Findings and Conclusion, Appendix, methodology and data source

## Contents

### 1 MARKET OVERVIEW

- 1.1 Blood Viscometer Introduction
- 1.2 Market Analysis by Type
  - 1.2.1 Rotational Viscometer
  - 1.2.2 Capillary Viscometer
- 1.3 Market Analysis by Applications
  - 1.3.1 Hospital
  - 1.3.2 Clinic
  - 1.3.3 Laboratory
- 1.4 Market Analysis by Countries
  - 1.4.1 United States Status and Prospect (2012-2022)
  - 1.4.2 Mexico Status and Prospect (2012-2022)
  - 1.4.3 Canada Status and Prospect (2012-2022)
- 1.5 Market Dynamics
  - 1.5.1 Market Opportunities
  - 1.5.2 Market Risk
  - 1.5.3 Market Driving Force

### 2 MANUFACTURERS PROFILES

- 2.1 Anton Paar
  - 2.1.1 Profile
  - 2.1.2 Blood Viscometer Type and Applications
    - 2.1.2.1 Type
    - 2.1.2.2 Type
  - 2.1.3 Anton Paar Blood Viscometer Sales, Price, Revenue, Gross Margin and Market Share (2016-2017)
  - 2.1.4 Business Overview
  - 2.1.5 Anton Paar News
- 2.2 Thermo Fisher Scientific
  - 2.2.1 Profile
  - 2.2.2 Blood Viscometer Type and Applications
    - 2.2.2.1 Type
    - 2.2.2.2 Type
  - 2.2.3 Thermo Fisher Scientific Blood Viscometer Sales, Price, Revenue, Gross Margin and Market Share (2016-2017)

- 2.2.4 Business Overview
- 2.2.5 Thermo Fisher Scientific News
- 2.3 Brookfield
  - 2.3.1 Profile
  - 2.3.2 Blood Viscometer Type and Applications
    - 2.3.2.1 Type
    - 2.3.2.2 Type
  - 2.3.3 Brookfield Blood Viscometer Sales, Price, Revenue, Gross Margin and Market Share (2016-2017)
  - 2.3.4 Business Overview
  - 2.3.5 Brookfield News
- 2.4 RheoSense
  - 2.4.1 Profile
  - 2.4.2 Blood Viscometer Type and Applications
    - 2.4.2.1 Type
    - 2.4.2.2 Type
  - 2.4.3 RheoSense Blood Viscometer Sales, Price, Revenue, Gross Margin and Market Share (2016-2017)
  - 2.4.4 Business Overview
  - 2.4.5 RheoSense News
- 2.5 Health Onvector
  - 2.5.1 Profile
  - 2.5.2 Blood Viscometer Type and Applications
    - 2.5.2.1 Type
    - 2.5.2.2 Type
  - 2.5.3 Health Onvector Blood Viscometer Sales, Price, Revenue, Gross Margin and Market Share (2016-2017)
  - 2.5.4 Business Overview
  - 2.5.5 Health Onvector News
- 2.6 ?BioFluid Technology
  - 2.6.1 Profile
  - 2.6.2 Blood Viscometer Type and Applications
    - 2.6.2.1 Type
    - 2.6.2.2 Type
  - 2.6.3 ?BioFluid Technology Blood Viscometer Sales, Price, Revenue, Gross Margin and Market Share (2016-2017)
  - 2.6.4 Business Overview
  - 2.6.5 ?BioFluid Technology News
- 2.7 LAUDA

- 2.7.1 Profile
- 2.7.2 Blood Viscometer Type and Applications
  - 2.7.2.1 Type
  - 2.7.2.2 Type
- 2.7.3 LAUDA Blood Viscometer Sales, Price, Revenue, Gross Margin and Market Share (2016-2017)
- 2.7.4 Business Overview
- 2.7.5 LAUDA News
- 2.8 LAMY RHEOLOGY
  - 2.8.1 Profile
  - 2.8.2 Blood Viscometer Type and Applications
    - 2.8.2.1 Type
    - 2.8.2.2 Type
  - 2.8.3 LAMY RHEOLOGY Blood Viscometer Sales, Price, Revenue, Gross Margin and Market Share (2016-2017)
  - 2.8.4 Business Overview
  - 2.8.5 LAMY RHEOLOGY News
- 2.9 Benson Viscometers
  - 2.9.1 Profile
  - 2.9.2 Blood Viscometer Type and Applications
    - 2.9.2.1 Type
    - 2.9.2.2 Type
  - 2.9.3 Benson Viscometers Blood Viscometer Sales, Price, Revenue, Gross Margin and Market Share (2016-2017)
  - 2.9.4 Business Overview
  - 2.9.5 Benson Viscometers News
- 2.10 HRD
  - 2.10.1 Profile
  - 2.10.2 Blood Viscometer Type and Applications
    - 2.10.2.1 Type
    - 2.10.2.2 Type
  - 2.10.3 HRD Blood Viscometer Sales, Price, Revenue, Gross Margin and Market Share (2016-2017)
  - 2.10.4 Business Overview
  - 2.10.5 HRD News

### **3 NORTH AMERICA BLOOD VISCOMETER MARKET COMPETITION, BY MANUFACTURER**

- 3.1 North America Blood Viscometer Sales and Market Share by Manufacturer (2016-2017)
- 3.2 North America Blood Viscometer Revenue and Market Share by Manufacturer (2016-2017)
- 3.3 North America Blood Viscometer Price by Manufacturers (2016-2017)
- 3.4 Market Concentration Rate
  - 3.4.1 Top 3 Blood Viscometer Manufacturer Market Share
  - 3.4.2 Top 5 Blood Viscometer Manufacturer Market Share
- 3.5 Market Competition Trend

## **4 NORTH AMERICA BLOOD VISCOMETER MARKET ANALYSIS BY COUNTRIES**

- 4.1 North America Blood Viscometer Sales Market Share by Countries
- 4.2 North America Blood Viscometer Sales by Countries (2012-2017)
- 4.3 North America Blood Viscometer Revenue (Value) by Countries (2012-2017)

## **5 NORTH AMERICA MARKET SEGMENTATION BLOOD VISCOMETER BY TYPE**

- 5.1 North America Blood Viscometer Sales, Revenue and Market Share by Type (2012-2017)
  - 5.1.1 North America Blood Viscometer Sales and Market Share by Type (2012-2017)
  - 5.1.2 North America Blood Viscometer Revenue and Market Share by Type (2012-2017)
- 5.2 Rotational Viscometer Sales Growth and Price
  - 5.2.1 North America Rotational Viscometer Sales Growth (2012-2017)
  - 5.2.2 North America Rotational Viscometer Price (2012-2017)
- 5.3 Capillary Viscometer Sales Growth and Price
  - 5.3.1 North America Capillary Viscometer Sales Growth (2012-2017)
  - 5.3.2 North America Capillary Viscometer Price (2012-2017)

## **6 NORTH AMERICA MARKET SEGMENTATION BLOOD VISCOMETER BY APPLICATION**

- 6.1 North America Blood Viscometer Sales Market Share by Application (2012-2017)
- 6.2 Hospital Sales Growth (2012-2017)
- 6.3 Clinic Sales Growth (2012-2017)
- 6.4 Laboratory Sales Growth (2012-2017)

## **7 UNITED STATES BLOOD VISCOMETER SALES, REVENUE, BY TYPE,**

## **APPLICATION AND MANUFACTURERS**

- 7.1 United States Blood Viscometer Revenue, Sales and Growth Rate (2012-2017)
- 7.2 United States Blood Viscometer Sales and Market Share by Type
- 7.3 United States Blood Viscometer Sales by Application (2012-2017)
- 7.4 United States Blood Viscometer Sales, Revenue and Market Share by Manufacturer
  - 7.4.1 United States Blood Viscometer Sales and Market Share by Manufacturer
  - 7.4.2 United States Blood Viscometer Revenue and Market Share by Manufacturer
- 7.5 United States Blood Viscometer Export and Import (2012-2017)

## **8 CANADA BLOOD VISCOMETER SALES, REVENUE, BY TYPE, APPLICATION AND MANUFACTURERS**

- 8.1 Canada Blood Viscometer Revenue, Sales and Growth Rate (2012-2017)
- 8.2 Canada Blood Viscometer Sales and Market Share by Type
- 8.3 Canada Blood Viscometer Sales by Application (2012-2017)
- 8.4 Canada Blood Viscometer Sales, Revenue and Market Share by Manufacturer
  - 8.4.1 Canada Blood Viscometer Sales and Market Share by Manufacturer
  - 8.4.2 Canada Blood Viscometer Revenue and Market Share by Manufacturer
- 8.5 Canada Blood Viscometer Export and Import (2012-2017)

## **9 MEXICO BLOOD VISCOMETER SALES, REVENUE, BY TYPE, APPLICATION AND MANUFACTURERS**

- 9.1 Mexico Blood Viscometer Revenue, Sales and Growth Rate (2012-2017)
- 9.2 Mexico Blood Viscometer Sales and Market Share by Type
- 9.3 Mexico Blood Viscometer Sales by Application (2012-2017)
- 9.4 Mexico Blood Viscometer Sales, Revenue and Market Share by Manufacturer
  - 9.4.1 Mexico Blood Viscometer Sales and Market Share by Manufacturer
  - 9.4.2 Mexico Blood Viscometer Revenue and Market Share by Manufacturer
- 9.5 Mexico Blood Viscometer Export and Import (2012-2017)

## **10 BLOOD VISCOMETER MARKET FORECAST (2017-2022)**

- 10.1 North America Blood Viscometer Sales, Revenue and Growth Rate (2017-2022)
- 10.2 Blood Viscometer Market Forecast by Countries (2017-2022)
  - 10.2.1 United States Blood Viscometer Forecast (2017-2022)
  - 10.2.2 Canada Blood Viscometer Forecast (2017-2022)
  - 10.2.3 Mexico Blood Viscometer Forecast (2017-2022)



10.3 Blood Viscometer Market Forecast by Type (2017-2022)

10.4 Blood Viscometer Market Forecast by Application (2017-2022)

## **11 BLOOD VISCOMETER MANUFACTURING COST ANALYSIS**

11.1 Blood Viscometer Key Raw Materials Analysis

11.1.1 Key Raw Materials

11.1.2 Price Trend of Key Raw Materials

11.1.3 Key Suppliers of Raw Materials

11.1.4 Market Concentration Rate of Raw Materials

11.2 Proportion of Manufacturing Cost Structure

11.2.1 Raw Materials

11.2.2 Labor Cost

11.2.3 Manufacturing Expenses

11.3 Manufacturing Process Analysis of Blood Viscometer

## **12 INDUSTRIAL CHAIN, SOURCING STRATEGY AND DOWNSTREAM BUYERS**

12.1 Blood Viscometer Industrial Chain Analysis

12.2 Upstream Raw Materials Sourcing

12.3 Raw Materials Sources of Blood Viscometer Major Manufacturers in 2016

12.4 Downstream Buyers

## **13 SALES CHANNEL, DISTRIBUTORS, TRADERS AND DEALERS**

13.1 Sales Channel

13.1.1 Direct Marketing

13.1.2 Indirect Marketing

13.1.3 Marketing Channel Future Trend

13.2 Distributors, Traders and Dealers

## **14 RESEARCH FINDINGS AND CONCLUSION**

## **15 APPENDIX**

15.1 Methodology

15.2 Analyst Introduction

15.3 Data Source

## List Of Tables

### LIST OF TABLES AND FIGURES

Figure Blood Viscometer Picture

Table Product Specifications of Blood Viscometer

Figure North America Sales Market Share of Blood Viscometer by Types in 2016

Table Types of Blood Viscometer

Figure Rotational Viscometer Picture

Table Major Manufacturers of Rotational Viscometer

Figure Capillary Viscometer Picture

Table Major Manufacturers of Capillary Viscometer

Table North America Blood Viscometer Sales Market Share by Applications in 2016

Table Applications of Blood Viscometer

Figure Hospital Picture

Figure Clinic Picture

Figure Laboratory Picture

Figure United States Blood Viscometer Revenue (Million USD) and Growth Rate (2012-2022)

Figure Mexico Blood Viscometer Revenue (Million USD) and Growth Rate (2012-2022)

Figure Canada Blood Viscometer Revenue (Million USD) and Growth Rate (2012-2022)

Table Anton Paar Basic Information, Manufacturing Base and Competitors

Table Anton Paar Blood Viscometer Type and Applications

Table Anton Paar Blood Viscometer Sales, Price, Revenue, Gross Margin and Market Share (2016-2017)

Table Thermo Fisher Scientific Basic Information, Manufacturing Base and Competitors

Table Thermo Fisher Scientific Blood Viscometer Type and Applications

Table Thermo Fisher Scientific Blood Viscometer Sales, Price, Revenue, Gross Margin and Market Share (2016-2017)

Table Brookfield Basic Information, Manufacturing Base and Competitors

Table Brookfield Blood Viscometer Type and Applications

Table Brookfield Blood Viscometer Sales, Price, Revenue, Gross Margin and Market Share (2016-2017)

Table RheoSense Basic Information, Manufacturing Base and Competitors

Table RheoSense Blood Viscometer Type and Applications

Table RheoSense Blood Viscometer Sales, Price, Revenue, Gross Margin and Market Share (2016-2017)

Table Health Onvector Basic Information, Manufacturing Base and Competitors

Table Health Onvector Blood Viscometer Type and Applications

Table Health Onvector Blood Viscometer Sales, Price, Revenue, Gross Margin and Market Share (2016-2017)

Table ?BioFluid Technology Basic Information, Manufacturing Base and Competitors

Table ?BioFluid Technology Blood Viscometer Type and Applications

Table ?BioFluid Technology Blood Viscometer Sales, Price, Revenue, Gross Margin and Market Share (2016-2017)

Table LAUDA Basic Information, Manufacturing Base and Competitors

Table LAUDA Blood Viscometer Type and Applications

Table LAUDA Blood Viscometer Sales, Price, Revenue, Gross Margin and Market Share (2016-2017)

Table LAMY RHEOLOGY Basic Information, Manufacturing Base and Competitors

Table LAMY RHEOLOGY Blood Viscometer Type and Applications

Table LAMY RHEOLOGY Blood Viscometer Sales, Price, Revenue, Gross Margin and Market Share (2016-2017)

Table Benson Viscometers Basic Information, Manufacturing Base and Competitors

Table Benson Viscometers Blood Viscometer Type and Applications

Table Benson Viscometers Blood Viscometer Sales, Price, Revenue, Gross Margin and Market Share (2016-2017)

Table HRD Basic Information, Manufacturing Base and Competitors

Table HRD Blood Viscometer Type and Applications

Table HRD Blood Viscometer Sales, Price, Revenue, Gross Margin and Market Share (2016-2017)

Table North America Blood Viscometer Sales by Manufacturer (2016-2017)

Figure North America Blood Viscometer Sales Market Share by Manufacturer in 2016

Figure North America Blood Viscometer Sales Market Share by Manufacturer in 2017

Table North America Blood Viscometer Revenue by Manufacturer (2016-2017)

Figure North America Blood Viscometer Revenue Market Share by Manufacturer in 2016

Figure North America Blood Viscometer Revenue Market Share by Manufacturer in 2017

Table North America Blood Viscometer Price by Manufacturers (2016-2017)

Figure Top 3 Blood Viscometer Manufacturer Market Share in 2016

Figure Top 3 Blood Viscometer Manufacturer Market Share in 2017

Figure Top 5 Blood Viscometer Manufacturer Market Share in 2016

Figure Top 5 Blood Viscometer Manufacturer Market Share in 2017

Figure North America Blood Viscometer Sales and Growth (2012-2017)

Table North America Blood Viscometer Sales by Countries (2012-2017)

Table North America Blood Viscometer Sales Market Share by Countries (2012-2017)

Figure North America 2012 Blood Viscometer Sales Market Share by Countries

Figure North America 2016 Blood Viscometer Sales Market Share by Countries  
Figure North America Blood Viscometer Revenue and Growth (2012-2017)  
Table North America Blood Viscometer Revenue by Countries (2012-2017)  
Table North America Blood Viscometer Revenue Market Share by Countries (2012-2017)  
Table North America 2012 Blood Viscometer Revenue Market Share by Countries  
Table North America 2016 Blood Viscometer Revenue Market Share by Countries  
Table North America Blood Viscometer Sales by Type (2012-2017)  
Table North America Blood Viscometer Sales Share by Type (2012-2017)  
Table North America Blood Viscometer Revenue by Type (2012-2017)  
Table North America Blood Viscometer Revenue Share by Type (2012-2017)  
Figure North America Rotational Viscometer Sales Growth (2012-2017)  
Figure North America Rotational Viscometer Price (2012-2017)  
Figure North America Capillary Viscometer Sales Growth (2012-2017)  
Figure North America Capillary Viscometer Price (2012-2017)  
Table North America Blood Viscometer Sales by Application (2012-2017)  
Table North America Blood Viscometer Sales Share by Application (2012-2017)  
Figure North America Hospital Sales Growth (2012-2017)  
Figure North America Clinic Sales Growth (2012-2017)  
Figure North America Laboratory Sales Growth (2012-2017)  
Figure United States Blood Viscometer Revenue and Growth (2012-2017)  
Figure United States Blood Viscometer Sales and Growth (2012-2017)  
Table United States Blood Viscometer Sales by Type (2012-2017)  
Table United States Blood Viscometer Sales Market Share by Type (2012-2017)  
Table United States Blood Viscometer Sales by Application (2012-2017)  
Table United States Blood Viscometer Sales Market Share by Application (2012-2017)  
Table United States Blood Viscometer Sales by Manufacturer (2016-2017)  
Figure United States Blood Viscometer Sales Market Share by Manufacturer in 2016  
Figure United States Blood Viscometer Sales Market Share by Manufacturer in 2017  
Table United States Blood Viscometer Revenue by Manufacturer (2016-2017)  
Figure United States Blood Viscometer Revenue Market Share by Manufacturer in 2016  
Figure United States Blood Viscometer Revenue Market Share by Manufacturer in 2017  
Table United States Blood Viscometer Export and Import (2012-2017)  
Figure Canada Blood Viscometer Revenue and Growth (2012-2017)  
Figure Canada Blood Viscometer Sales and Growth (2012-2017)  
Table Canada Blood Viscometer Sales by Type (2012-2017)  
Table Canada Blood Viscometer Sales Market Share by Type (2012-2017)  
Table Canada Blood Viscometer Sales by Application (2012-2017)  
Table Canada Blood Viscometer Sales Market Share by Application (2012-2017)

Table Canada Blood Viscometer Sales by Manufacturer (2016-2017)  
Figure Canada Blood Viscometer Sales Market Share by Manufacturer in 2016  
Figure Canada Blood Viscometer Sales Market Share by Manufacturer in 2017  
Table Canada Blood Viscometer Revenue by Manufacturer (2016-2017)  
Figure Canada Blood Viscometer Revenue Market Share by Manufacturer in 2016  
Figure Canada Blood Viscometer Revenue Market Share by Manufacturer in 2017  
Table Canada Blood Viscometer Export and Import (2012-2017)  
Figure Mexico Blood Viscometer Revenue and Growth (2012-2017)  
Figure Mexico Blood Viscometer Sales and Growth (2012-2017)  
Table Mexico Blood Viscometer Sales by Type (2012-2017)  
Table Mexico Blood Viscometer Sales Market Share by Type (2012-2017)  
Table Mexico Blood Viscometer Sales by Application (2012-2017)  
Table Mexico Blood Viscometer Sales Market Share by Application (2012-2017)  
Table Mexico Blood Viscometer Sales by Manufacturer (2016-2017)  
Figure Mexico Blood Viscometer Sales Market Share by Manufacturer in 2016  
Figure Mexico Blood Viscometer Sales Market Share by Manufacturer in 2017  
Table Mexico Blood Viscometer Revenue by Manufacturer (2016-2017)  
Figure Mexico Blood Viscometer Revenue Market Share by Manufacturer in 2016  
Figure Mexico Blood Viscometer Revenue Market Share by Manufacturer in 2017  
Table Mexico Blood Viscometer Export and Import (2012-2017)  
Figure North America Blood Viscometer Sales, Revenue and Growth Rate (2017-2022)  
Table North America Blood Viscometer Sales Forecast by Countries (2017-2022)  
Table North America Blood Viscometer Market Share Forecast by Countries (2017-2022)  
Figure United States Blood Viscometer Sales Forecast (2017-2022)  
Figure Canada Blood Viscometer Sales Forecast (2017-2022)  
Figure Mexico Blood Viscometer Sales Forecast (2017-2022)  
Table North America Blood Viscometer Sales Forecast by Type (2017-2022)  
Table North America Blood Viscometer Market Share Forecast by Type (2017-2022)  
Table North America Blood Viscometer Sales Forecast by Application (2017-2022)  
Table North America Blood Viscometer Market Share Forecast by Application (2017-2022)  
Table Sales Base and Market Concentration Rate of Raw Material  
Figure Price Trend of Key Raw Materials  
Table Key Suppliers of Raw Materials  
Figure Manufacturing Cost Structure of Blood Viscometer  
Figure Manufacturing Process Analysis of Blood Viscometer  
Figure Blood Viscometer Industrial Chain Analysis  
Table Raw Materials Sources of Blood Viscometer Major Manufacturers in 2016

Table Major Buyers of Blood Viscometer  
Table Distributors/Traders/ Dealers List

## I would like to order

Product name: North America Blood Viscometer Market by Manufacturers, Countries, Type and Application, Forecast to 2022

Product link: <https://marketpublishers.com/r/N94C6AC5E5AEN.html>

Price: US\$ 4,480.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer Service:

[info@marketpublishers.com](mailto:info@marketpublishers.com)

## Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <https://marketpublishers.com/r/N94C6AC5E5AEN.html>

To pay by Wire Transfer, please, fill in your contact details in the form below:

First name:  
Last name:  
Email:  
Company:  
Address:  
City:  
Zip code:  
Country:  
Tel:  
Fax:  
Your message:

**\*\*All fields are required**

Customer signature \_\_\_\_\_

Please, note that by ordering from marketpublishers.com you are agreeing to our Terms & Conditions at <https://marketpublishers.com/docs/terms.html>

To place an order via fax simply print this form, fill in the information below and fax the completed form to +44 20 7900 3970

