

Global Thermochromic Pigment Market Size Study, by Product (Liquid Crystal Material, Leuco Dyes), by Pigment Type (Reversible Thermochromic Pigments, Irreversible Thermochromic Pigments), by End-Use Industry (Printing Ink) and Regional Forecasts 2022-2032

<https://marketpublishers.com/r/GC2EFE418DD6EN.html>

Date: March 2025

Pages: 285

Price: US\$ 3,750.00 (Single User License)

ID: GC2EFE418DD6EN

Abstracts

The Global Thermochromic Pigment Market is valued at approximately USD 1.76 billion in 2023 and is anticipated to grow with a robust CAGR of 5.10% over the forecast period 2024-2032. Thermochromic pigments, widely utilized across multiple industries, exhibit a fascinating ability to change color in response to temperature fluctuations, making them indispensable in applications such as packaging, textiles, security printing, and novelty items. These pigments play a pivotal role in enhancing product appeal and security, thereby driving their growing adoption. The industry has witnessed a steady surge in demand due to the increasing preference for dynamic and interactive packaging solutions, particularly in consumer goods and branding initiatives. As technological advancements continue to refine pigment stability and application versatility, market players are strategically investing in research and development to expand product offerings and optimize cost efficiencies.

The Thermochromic Pigment Market is witnessing a strong uptrend, primarily propelled by the surging demand in security printing applications and advanced packaging solutions. The proliferation of counterfeit goods has intensified the demand for authentication and anti-counterfeiting solutions, positioning thermochromic pigments as an integral component in security labels, banknotes, and brand protection measures. Additionally, the increasing application of these pigments in smart textiles, owing to their aesthetic appeal and functional adaptability, is further contributing to market growth.

Governments and regulatory bodies are also endorsing the use of these pigments in food packaging to ensure temperature-sensitive products maintain optimal conditions, reinforcing consumer safety measures and industry standards.

Geographically, the market dynamics exhibit substantial regional variations. North America, being a technologically advanced region, holds a dominant position in the thermochromic pigment market, driven by extensive R&D activities and strong demand from security and packaging industries. Europe follows closely, with increasing applications in high-end packaging and safety applications. Meanwhile, Asia-Pacific is poised to witness the fastest growth over the forecast period, primarily fueled by the booming manufacturing sector, rising disposable incomes, and expanding applications in smart textiles and consumer electronics. Countries such as China, India, and Japan are spearheading regional advancements, with strong industrial infrastructure and rapid adoption of innovative technologies driving market expansion.

Major market players included in this report are:

3M Company

RPM International Inc.

Sherwin-Williams Company

DuPont de Nemours, Inc.

PPG Industries, Inc.

DIC Corporation

Chromatic Technologies Inc.

OliKrom

LCR Hallcrest, LLC

Flint Group

QCR Solutions Corp

Smarol Industry Co., Ltd.

H.W. Sands Corp.

Eptanova S.r.l

Kolortek Co., Ltd.

The detailed segments and sub-segments of the market are explained below:

By Product:

Liquid Crystal Material

Leuco Dyes

By Pigment Type:

Reversible Thermochromic Pigments

Irreversible Thermochromic Pigments

By End-Use Industry:

Printing Ink

By Region:

North America

U.S.

Canada

Europe

UK

Germany

France

Spain

Italy

Rest of Europe

Asia Pacific

China

India

Japan

Australia

South Korea

Rest of Asia Pacific

Latin America

Brazil

Mexico

Rest of Latin America

Middle East & Africa

Saudi Arabia

South Africa

Rest of Middle East & Africa

Years considered for the study are as follows:

Historical year – 2022

Base year – 2023

Forecast period – 2024 to 2032

Key Takeaways:

Market Estimates & Forecast for 10 years from 2022 to 2032.

Annualized revenues and regional level analysis for each market segment.

Detailed analysis of geographical landscape with country-level analysis of major regions.

Competitive landscape with information on major players in the market.

Analysis of key business strategies and recommendations on future market approach.

Analysis of competitive structure of the market.

Demand-side and supply-side analysis of the market.

Contents

CHAPTER 1. GLOBAL THERMOCHROMIC PIGMENT MARKET EXECUTIVE SUMMARY

- 1.1. Global ThermoChromic Pigment Market Size & Forecast (2022-2032)
- 1.2. Regional Summary
- 1.3. Segmental Summary
 - 1.3.1. By Product (Liquid Crystal Material, Leuco Dyes)
 - 1.3.2. By Pigment Type (Reversible, Irreversible)
 - 1.3.3. By End-Use Industry (Printing Ink)
- 1.4. Key Trends
- 1.5. Recession Impact
- 1.6. Analyst Recommendation & Conclusion

CHAPTER 2. GLOBAL THERMOCHROMIC PIGMENT MARKET DEFINITION AND RESEARCH ASSUMPTIONS

- 2.1. Research Objective
- 2.2. Market Definition
- 2.3. Research Assumptions
 - 2.3.1. Inclusion & Exclusion
 - 2.3.2. Limitations
 - 2.3.3. Supply Side Analysis
 - 2.3.3.1. Availability
 - 2.3.3.2. Infrastructure
 - 2.3.3.3. Regulatory Environment
 - 2.3.3.4. Market Competition
 - 2.3.3.5. Economic Viability (Consumer's Perspective)
 - 2.3.4. Demand Side Analysis
 - 2.3.4.1. Regulatory Frameworks
 - 2.3.4.2. Technological Advancements
 - 2.3.4.3. Environmental Considerations
 - 2.3.4.4. Consumer Awareness & Acceptance
- 2.4. Estimation Methodology
- 2.5. Years Considered for the Study
- 2.6. Currency Conversion Rates

CHAPTER 3. GLOBAL THERMOCHROMIC PIGMENT MARKET DYNAMICS

Global ThermoChromic Pigment Market Size Study, by Product (Liquid Crystal Material, Leuco Dyes), by Pigment T...

3.1. Market Drivers

- 3.1.1. Surge in Dynamic Packaging Solutions
- 3.1.2. Technological Advancements in Pigment Stability
- 3.1.3. Government Regulations and Safety Standards

3.2. Market Challenges

- 3.2.1. High Production Costs
- 3.2.2. Raw Material Price Volatility

3.3. Market Opportunities

- 3.3.1. Growing Demand in Security Printing Applications
- 3.3.2. Expansion in Smart Textiles and Novelty Items
- 3.3.3. Emerging Markets in Asia-Pacific

CHAPTER 4. GLOBAL THERMOCHROMIC PIGMENT MARKET INDUSTRY ANALYSIS

4.1. Porter's 5 Force Model

- 4.1.1. Bargaining Power of Suppliers
- 4.1.2. Bargaining Power of Buyers
- 4.1.3. Threat of New Entrants
- 4.1.4. Threat of Substitutes
- 4.1.5. Competitive Rivalry
- 4.1.6. Futuristic Approach to Porter's 5 Force Model
- 4.1.7. Porter's 5 Force Impact Analysis

4.2. PESTEL Analysis

- 4.2.1. Political
- 4.2.2. Economical
- 4.2.3. Social
- 4.2.4. Technological
- 4.2.5. Environmental
- 4.2.6. Legal

4.3. Top Investment Opportunity

4.4. Top Winning Strategies

4.5. Disruptive Trends

4.6. Industry Expert Perspective

4.7. Analyst Recommendation & Conclusion

CHAPTER 5. GLOBAL THERMOCHROMIC PIGMENT MARKET SIZE & FORECASTS BY PRODUCT 2022-2032

5.1. Segment Dashboard

5.2. Global Thermochromic Pigment Market: Product Revenue Trend Analysis, 2022 & 2032 (USD Million/Billion)

5.2.1. Liquid Crystal Material

5.2.2. Leuco Dyes

CHAPTER 6. GLOBAL THERMOCHROMIC PIGMENT MARKET SIZE & FORECASTS BY PIGMENT TYPE 2022-2032

6.1. Segment Dashboard

6.2. Global Thermochromic Pigment Market: Pigment Type Revenue Trend Analysis, 2022 & 2032 (USD Million/Billion)

6.2.1. Reversible Thermochromic Pigments

6.2.2. Irreversible Thermochromic Pigments

CHAPTER 7. GLOBAL THERMOCHROMIC PIGMENT MARKET SIZE & FORECASTS BY END-USE INDUSTRY 2022-2032

7.1. Segment Dashboard

7.2. Global Thermochromic Pigment Market: End-Use Industry Revenue Trend Analysis, 2022 & 2032 (USD Million/Billion)

7.2.1. Printing Ink

CHAPTER 8. GLOBAL THERMOCHROMIC PIGMENT MARKET SIZE & FORECASTS BY REGION 2022-2032

8.1. North America Market

8.1.1. U.S. Thermochromic Pigment Market

8.1.2. Canada Thermochromic Pigment Market

8.2. Europe Market

8.2.1. U.K. Thermochromic Pigment Market

8.2.2. Germany Thermochromic Pigment Market

8.2.3. France Thermochromic Pigment Market

8.2.4. Spain Thermochromic Pigment Market

8.2.5. Italy Thermochromic Pigment Market

8.2.6. Rest of Europe Thermochromic Pigment Market

8.3. Asia-Pacific Market

8.3.1. China Thermochromic Pigment Market

- 8.3.2. India Thermochromic Pigment Market
- 8.3.3. Japan Thermochromic Pigment Market
- 8.3.4. Australia Thermochromic Pigment Market
- 8.3.5. South Korea Thermochromic Pigment Market
- 8.3.6. Rest of Asia-Pacific Thermochromic Pigment Market
- 8.4. Latin America Market
 - 8.4.1. Brazil Thermochromic Pigment Market
 - 8.4.2. Mexico Thermochromic Pigment Market
 - 8.4.3. Rest of Latin America Thermochromic Pigment Market
- 8.5. Middle East & Africa Market
 - 8.5.1. Saudi Arabia Thermochromic Pigment Market
 - 8.5.2. South Africa Thermochromic Pigment Market
 - 8.5.3. Rest of Middle East & Africa Thermochromic Pigment Market

CHAPTER 9. COMPETITIVE INTELLIGENCE

- 9.1. Key Company SWOT Analysis
 - 9.1.1. 3M Company
 - 9.1.2. Sherwin-Williams Company
 - 9.1.3. DuPont de Nemours, Inc.
- 9.2. Top Market Strategies
- 9.3. Company Profiles
 - 9.3.1. 3M Company
 - 9.3.1.1. Key Information
 - 9.3.1.2. Overview
 - 9.3.1.3. Financial (Subject to Data Availability)
 - 9.3.1.4. Product Summary
 - 9.3.1.5. Market Strategies
 - 9.3.2. RPM International Inc.
 - 9.3.3. PPG Industries, Inc.
 - 9.3.4. DIC Corporation
 - 9.3.5. Chromatic Technologies Inc.
 - 9.3.6. OliKrom
 - 9.3.7. LCR Hallcrest, LLC
 - 9.3.8. Flint Group
 - 9.3.9. QCR Solutions Corp
 - 9.3.10. Smarol Industry Co., Ltd.
 - 9.3.11. H.W. Sands Corp.
 - 9.3.12. Eptanova S.r.l

9.3.13. Kolortek Co., Ltd.

CHAPTER 10. RESEARCH PROCESS

10.1. Research Process

10.1.1. Data Mining

10.1.2. Analysis

10.1.3. Market Estimation

10.1.4. Validation

10.1.5. Publishing

10.2. Research Attributes

I would like to order

Product name: Global Thermochromic Pigment Market Size Study, by Product (Liquid Crystal Material, Leuco Dyes), by Pigment Type (Reversible Thermochromic Pigments, Irreversible Thermochromic Pigments), by End-Use Industry (Printing Ink) and Regional Forecasts 2022-2032

Product link: <https://marketpublishers.com/r/GC2EFE418DD6EN.html>

Price: US\$ 3,750.00 (Single User License / Electronic Delivery)

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

info@marketpublishers.com

Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <https://marketpublishers.com/r/GC2EFE418DD6EN.html>