

Cold Chain Market for Pharmaceuticals: Distribution by Type of Primary Packaging (Vials, Ampoules, Pre-filled Syringes and Bags), Type of Secondary Packaging (Cold Boxes, Vaccine Carriers and Insulated Containers), Type of Usability (Reusable and Single-use) and Key Geographical Regions (North America, Europe, Asia-Pacific, Middle East and North Africa, Latin America and Rest of the World): Historical Trends (2019-2022) and Forecasted Estimates (2023-2035)

<https://marketpublishers.com/r/C3A03357263EEN.html>

Date: October 2023

Pages: 255

Price: US\$ 4,799.00 (Single User License)

ID: C3A03357263EEN

Abstracts

The global cold chain market is expected to reach USD 6.2 billion in 2023 anticipated to grow at a CAGR of 3.7% during the forecast period 2023-2035.

The cold chain system is a complex, well-coordinated process that manages temperature-sensitive materials during storage and transportation. It relies on various tools like cold chain shippers, insulated containers, and monitoring devices such as data loggers. Widely used in food, dairy, chemical, and pharmaceutical industries, its main aim is to prolong the shelf life of perishable items like fresh produce, vaccines, and medicines, ensuring their quality remains intact. Specifically in pharmaceuticals, it caters to strict temperature needs, ensuring the integrity of biologics, COVID vaccines, and organ transplants. Recent advances in monitoring, like temperature sensors and real-time tracking, have significantly improved efficiency by enabling continuous monitoring during shipment.

However, challenges persist, especially in packaging and temperature control during pharmaceutical storage and transport. In some areas, inadequate packaging and temperature management lead to a significant portion of drugs losing effectiveness. Unexpected issues such as equipment failures or exposure to high temperatures can disrupt the cold chain, risking damage or contamination. To tackle these challenges, industry players are exploring hybrid solutions that integrate temperature data loggers into cold chain containers. This integration offers better visibility and more efficient tracking of pharmaceutical shipments, presenting a promising alternative to traditional packaging. With ongoing advancements and industry efforts driving growth, the pharmaceutical cold chain market is expected to expand significantly in the foreseeable future.

Report Coverage

The report comprehensively examines the pharmaceutical cold chain market, focusing on primary packaging type of primary packaging, type of secondary packaging, type of usability and key geographical regions.

It conducts a thorough analysis of the market's growth influencers, encompassing drivers, restraints, opportunities, and challenges.

Evaluation of potential advantages and obstacles within the market landscape is provided, along with insights into the competitive environment for leading market players.

Revenue forecasts for market segments are presented concerning six major regions.

Detailed insights into the research methodology are offered, covering methodologies, assumptions, and quality control measures to ensure precision and reliability of findings.

Historical trends, currency fluctuations, foreign exchange impacts, and economic measures impacting the overall pharmaceutical cold chain market are examined.

A comprehensive overview of the current status and anticipated future developments in the pharmaceutical cold chain market over the mid-to-long term is presented.

An exploration of cold chain packaging, its historical evolution, diverse packaging solutions, pharmaceutical applications, existing challenges, and future prospects is provided.

Comprehensive evaluations of 72 cold chain container/shipper providers and 70 data logger providers are conducted, considering various parameters such as establishment year, company size, product types, and technological aspects.

Comparative analysis of key focus areas among cold chain container/shipper providers in North America, Europe, and Asia-Pacific is presented, aiding stakeholders in identifying competitive advantages.

Detailed profiles of key cold chain container/shipper providers, including company overview, product portfolios, recent developments, and future outlook, are outlined.

Examination of partnerships, collaborations, mergers, and acquisitions among stakeholders, including partnership types, applications, and active industry players since 2019, is provided.

In-depth exploration of patents filed or granted since 2019, encompassing publication and application years, organizations, leading industry players, and valuation analysis, is conducted.

Detailed discussion on regulatory guidelines issued by international and regional authorities is presented, offering recommendations for different stages of the cold chain process along with a comparative analysis of regulatory bodies.

Analysis of emerging trends, growth opportunities, technological advancements, real-time monitoring, integration methods, and associated benefits in the pharmaceutical cold chain industry is provided.

Comprehensive analysis of factors influencing the growth of the pharmaceutical cold chain market, including drivers, restraints, opportunities, and challenges, is included.

Key Market Companies

Cold Chain Technologies

Cryopak

CSafe

EMBALL'ISO

Intelsius

Nordic Cold Chain Solutions

Peli BioThermal

SEE

SOFRIGAM

Sonoco Thermosafe

Tempack

Contents

1. PREFACE

- 1.1. Cold Chain Market for Pharmaceuticals
- 1.2. Key Market Insights
- 1.3. Scope of the Report
- 1.4. Research Methodology
- 1.5. Frequently Asked Questions
- 1.6. Chapter Outlines

2. RESEARCH METHODOLOGY

- 2.1. Chapter Overview
- 2.2. Research Assumptions
- 2.3. Project Methodology
- 2.4. Forecast Methodology
- 2.5. Robust Quality Control
- 2.6. Key Market Segmentations
- 2.7. Key Considerations
 - 2.7.1. Demographics
 - 2.7.2. Economic Factors
 - 2.7.3. Government Regulations
 - 2.7.4. Supply Chain
 - 2.7.5. COVID Impact / Related Factors
 - 2.7.6. Market Access
 - 2.7.7. Healthcare Policies
 - 2.7.8. Industry Consolidation

3. ECONOMIC AND OTHER PROJECT SPECIFIC CONSIDERATIONS

- 3.1. Chapter Overview
- 3.2. Market Dynamics
 - 3.2.1. Time Period
 - 3.2.1.1. Historical Trends
 - 3.2.1.2. Current and Forecasted Estimates
 - 3.2.2. Currency Coverage
 - 3.2.2.1. Overview of Major Currencies Affecting the Market
 - 3.2.2.2. Impact of Currency Fluctuations on the Industry

3.2.3. Foreign Exchange Impact

3.2.3.1. Evaluation of Foreign Exchange Rates and Their Impact on Market

3.2.3.2. Strategies for Mitigating Foreign Exchange Risk

3.2.4. Recession

3.2.4.1. Historical Analysis of Past Recessions and Lessons Learnt

3.2.4.2. Assessment of Current Economic Conditions and Potential Impact on the Market

3.2.5. Inflation

3.2.5.1. Measurement and Analysis of Inflationary Pressures in the Economy

3.2.5.2. Potential Impact of Inflation on the Market Evolution

4. EXECUTIVE SUMMARY

5. INTRODUCTION

5.1. Chapter Overview

5.2. Introduction to Cold Chain Packaging

5.3. Historical Timeline of Cold Chain

5.4. Cold Chain Solutions for Pharmaceutical Industry

5.4.1. Cold Chain Packaging Solutions: Containers and Shippers

5.4.1.1. Active Cold Chain Packaging Solutions

5.4.1.2. Passive Cold Chain Packaging Solutions

5.4.1.3. Insulated Cold Chain Packaging Solutions

5.4.2. Cold Chain Monitoring Solutions: Data Loggers

5.4.2.1. Data Loggers

5.4.2.2. Indicators

5.5. Applications of Cold Chain in Pharmaceutical Industry

5.6. Current Challenges and Future Perspectives

6. OVERALL MARKET LANDSCAPE: COLD CHAIN CONTAINER / SHIPPER PROVIDERS

6.1. Chapter Overview

6.2. Cold Chain Container / Shipper Providers: Overall Market Landscape

6.2.1. Analysis by Year of Establishment

6.2.2. Analysis by Company Size

6.2.3. Analysis by Location of Headquarters (Region)

6.2.4. Analysis by Location of Headquarters (Country)

6.2.5. Analysis by Type of Cold Chain Solution

- 6.2.6. Analysis by Type of Product Offered
- 6.2.7. Analysis by Type of Product Material
- 6.2.8. Analysis by Type of Product Packaged
- 6.2.9. Analysis by Storage Temperature
- 6.2.10. Analysis by Type of Service Offered
- 6.2.11. Analysis by Company Size and Type of Service Offered

7. OVERALL MARKET LANDSCAPE: DATA LOGGER PROVIDERS

- 7.1. Chapter Overview
- 7.2. Data Logger Providers: Overall Market Landscape
- 7.3. Analysis by Year of Establishment
- 7.4. Analysis by Company Size
- 7.5. Analysis by Location of Headquarters (Region)
- 7.6. Analysis by Location of Headquarters (Country)
- 7.7. Analysis by Type of Product Offered
- 7.8. Analysis by Mode of Data Transmission
- 7.9. Analysis by Type of Data Captured
- 7.10. Analysis by Type of Pharmaceutical Monitored
- 7.11. Analysis by Temperature Range
- 7.12. Analysis by Type of Product Offered and Mode of Data Transmission
- 7.13. Analysis by Type of Product Offered and Type of Data Captured

8. COMPETITIVE BENCHMARKING

- 8.1. Chapter Overview
- 8.2. Assumptions and Methodology
- 8.3. Competitive Benchmarking of Cold Chain Container / Shipper Providers
 - 8.3.1. Competitive Benchmarking: Players based in North America (Peer Group I)
 - 8.3.2. Competitive Benchmarking: Players based in Europe (Peer Group II)
 - 8.3.3. Competitive Benchmarking: Large Players based in Asia-Pacific and RoW (Peer Group III)
- 8.4. Concluding Remarks

9. COMPANY PROFILES

- 9.1. Chapter Overview
- 9.2. Cold Chain Technologies
 - 9.2.1. Company Overview

- 9.2.2. Product Portfolio
- 9.2.3. Service Portfolio
- 9.2.4. Recent Developments and Future Outlook
- 9.3. Cryopak
 - 9.3.1. Company Overview
 - 9.3.2. Product Portfolio
 - 9.3.3. Service Portfolio
 - 9.3.4. Recent Developments and Future Outlook
- 9.4. CSafe
 - 9.4.1. Company Overview
 - 9.4.2. Product Portfolio
 - 9.4.3. Service Portfolio
 - 9.4.4. Recent Developments and Future Outlook
- 9.5. EMBALL'ISO
 - 9.5.1. Company Overview
 - 9.5.2. Product Portfolio
 - 9.5.3. Service Portfolio
 - 9.5.4. Recent Developments and Future Outlook
- 9.6. Intelsius
 - 9.6.1. Company Overview
 - 9.6.2. Product Portfolio
 - 9.6.3. Service Portfolio
 - 9.6.4. Recent Developments and Future Outlook
- 9.7. Nordic Cold Chain Solutions
 - 9.7.1. Company Overview
 - 9.7.2. Product Portfolio
 - 9.7.3. Service Portfolio
 - 9.7.4. Recent Developments and Future Outlook
- 9.8. Peli BioThermal
 - 9.8.1. Company Overview
 - 9.8.2. Product Portfolio
 - 9.8.3. Service Portfolio
 - 9.8.4. Recent Developments and Future Outlook
- 9.9. SEE
 - 9.9.1. Company Overview
 - 9.9.2. Product Portfolio
 - 9.9.3. Service Portfolio
 - 9.9.4. Recent Developments and Future Outlook
- 9.10. SOFRIGAM

- 9.10.1. Company Overview
- 9.10.2. Product Portfolio
- 9.10.3. Service Portfolio
- 9.10.4. Recent Developments and Future Outlook
- 9.11. Sonoco Thermosafe
 - 9.11.1. Company Overview
 - 9.11.2. Product Portfolio
 - 9.11.3. Service Portfolio
 - 9.11.4. Recent Developments and Future Outlook
- 9.12. Tempack
 - 9.12.1. Company Overview
 - 9.12.2. Product Portfolio
 - 9.12.3. Service Portfolio
 - 9.12.4. Recent Developments and Future Outlook
- 9.13. Other Leading Players
 - 9.13.1. Almac
 - 9.13.2. B Medical Systems
 - 9.13.3. BioLife Solutions
 - 9.13.4. CRS Mobile Cold Storage
 - 9.13.5. Desert Valley Tech
 - 9.13.6. Dubai Instruments
 - 9.13.7. Envirotainer
 - 9.13.8. Global Cold Chain Solutions (Headquartered in Australia)
 - 9.13.9. Global Cold Chain Solutions (Headquartered in Singapore)
 - 9.13.10. Klinge
 - 9.13.11. Krautz-temax
 - 9.13.12. Meds2go
 - 9.13.13. phasetwo
 - 9.13.14. Polar Tech Industries
 - 9.13.15. Skycell
 - 9.13.16. UPS Healthcare

10. PARTNERSHIPS AND COLLABORATIONS

- 10.1. Chapter Overview
- 10.2. Partnership Models
- 10.3. Cold Chain for Pharmaceuticals: Partnerships and Collaborations
 - 10.3.1. Analysis by Year of Partnership
 - 10.3.2. Analysis by Type of Partnership

- 10.3.3. Analysis by Year and Type of Partnership
- 10.3.4. Analysis by Application Area
- 10.3.5. Analysis by Type of Product / Technology
- 10.3.6. Analysis by Geography
 - 10.3.6.1. Local and International Agreements
 - 10.3.6.2. Intercontinental and Intracontinental Agreements
- 10.3.7 Most Active Players: Analysis by Number of Partnerships
- 10.4. Cold Chain for Pharmaceuticals: Acquisitions
 - 10.4.1. Analysis by Year of Acquisition
 - 10.4.2. Analysis by Type of Acquisition
 - 10.4.2. Analysis by Year and Type of Acquisition
 - 10.4.3. Analysis by Application Area
 - 10.4.4. Analysis by Type of Product / Technology
 - 10.4.5. Analysis by Geography
 - 10.4.5.1. Local and International Agreements
 - 10.4.5.2. Intercontinental and Intracontinental Agreements
 - 10.4.6. Ownership Change Matrix
 - 10.4.7. Analysis by Key Value Drivers

11. PATENT ANALYSIS

- 11.1. Chapter Overview
- 11.2. Scope and Methodology
- 11.3. Cold Chain for Pharmaceuticals: Patent Analysis
 - 11.3.1. Analysis by Type of Patent
 - 11.3.2. Analysis by Publication Year
 - 11.3.3. Analysis by Type of Patent and Publication Year
 - 11.3.4. Analysis by Application Year
 - 11.3.5. Analysis by Type of Organization
 - 11.3.6. Analysis by Patent Jurisdiction
 - 11.3.7. Analysis by CPC Symbols
 - 11.3.8. Analysis by Emerging Focus Area
 - 11.3.9. Leading Industry Players: Analysis by Number of Patents
- 11.4. Cold Chain for Pharmaceuticals: Patent Benchmarking Analysis
 - 11.4.1. Analysis by Patent Characteristics
 - 11.4.1.1. Cold Chain Technologies and Ember LifeSciences
 - 11.4.1.2. Other Leading Patent Assignees
- 11.5. Patent Valuation Analysis

12. REGULATORY RECOMMENDATIONS AND GUIDELINES

- 12.1. Chapter Overview
- 12.2. Regulatory Guidelines Issued by International Authorities
 - 12.2.1. World Health Organization (WHO)
 - 12.2.2. International Air Transport Association (IATA)
 - 12.2.3. International Safe Transit Association (ISTA)
- 12.3. Regulatory Guidelines Issued by Regional Authorities
 - 12.3.1. Regulatory Guidelines for Cold Chain Management in the US
 - 12.3.1.1. United States Food and Drug Administration (USFDA)
 - 12.3.2. United States Pharmacopeia (USP)
 - 12.3.3. Regulatory Guidelines for Cold Chain Management in Canada
 - 12.3.3.1. Health Canada
 - 12.3.4. Regulatory Guidelines for Cold Chain Management in Europe
 - 12.3.4.1. European Medicine Agency
- 12.4. Recommendations for Different Steps of Cold Chain
- 12.5. Comparative Analysis of Regulatory Authorities

13. UPCOMING TRENDS AND FUTURE GROWTH OPPORTUNITIES

- 13.1. Chapter Overview
- 13.2. Connected Cold Chain: Key Tools and Technologies
 - 13.2.1. Artificial Intelligence
 - 13.2.2. Augmented Reality
 - 13.2.3. Automation and Robotics
 - 13.2.4. Big Data Analytics
 - 13.2.5. Block Chain Technology
 - 13.2.6. Cloud Computing
 - 13.2.7. Internet of Things
 - 13.2.8. Radio Frequency Identification (RFID) Tags
- 13.3. Connected Cold Chain: Future Growth Opportunities
- 13.4. Real-Time Monitoring: An Application of Connected Cold Chain Solutions
 - 13.4.1 Methods for Integration of Real-Time Monitoring in Cold Chain
 - 13.4.1.1. RFID Based Real-Time Monitoring
 - 13.4.1.2. Blockchain And IoT Based Real-Time Monitoring
 - 13.4.2. Growth Opportunities for Real-Time Monitoring in Connected Cold Chain
 - 13.4.3. Cost Benefits of Real-Time Monitoring in Cold Chain

14. MARKET IMPACT ANALYSIS: DRIVERS, RESTRAINTS, OPPORTUNITIES AND

CHALLENGES

- 14.1. Chapter Overview
- 14.2. Market Drivers
- 14.3. Market Restraints
- 14.4. Market Opportunities
- 14.5. Market Challenges
- 14.6. Conclusion

15. COLD CHAIN MARKET FOR PHARMACEUTICALS

- 15.1. Chapter Overview
- 15.2. Assumptions and Methodology
- 15.3. Global Cold Chain Market for Pharmaceuticals, Historical Trends (2019-2022) and Forecasted Estimates (2023-2035)
 - 15.3.1. Scenario Analysis
- 15.4. Key Market Segmentations
- 15.5. Dynamic Dashboard

16. COLD CHAIN MARKET FOR PHARMACEUTICALS, BY TYPE OF PRIMARY PACKAGING

- 16.1. Chapter Overview
- 16.2. Key Assumptions and Methodology
- 16.3. Vials: Historical Trends (2019-2022) and Forecasted Estimates (2023-2035)
- 16.4. Ampoules: Historical Trends (2019-2022) and Forecasted Estimates (2023-2035)
- 16.5. Pre-filled Syringes: Historical Trends (2019-2022) and Forecasted Estimates (2023-2035)
- 16.6. Bags: Historical Trends (2019-2022) and Forecasted Estimates (2023-2035)
- 16.7. Data Triangulation
 - 16.7.1. Insights from Primary Research
 - 16.7.2. Insights from Secondary Research
 - 16.7.3. Insights from In-house Repository

17. COLD CHAIN MARKET FOR PHARMACEUTICALS, BY TYPE OF SECONDARY PACKAGING

- 17.1. Chapter Overview
- 17.2. Key Assumptions and Methodology

17.3. Cold Boxes: Historical Trends (2019-2022) and Forecasted Estimates (2023-2035)

17.4. Vaccine Carriers: Historical Trends (2019-2022) and Forecasted Estimates (2023-2035)

17.5. Insulated Containers: Historical Trends (2019-2022) and Forecasted Estimates (2023-2035)

17.6. Data Triangulation

17.6.1. Insights from Primary Research

17.6.2. Insights from Secondary Research

17.7.3. Insights from In-house Repository

18. COLD CHAIN MARKET FOR PHARMACEUTICALS, BY TYPE OF USABILITY

18.1. Chapter Overview

18.2. Key Assumptions and Methodology

18.3. Reusable Containers / Shippers: Historical Trends (2019-2022) and Forecasted Estimates (2023-2035)

18.4. Single-use Containers / Shippers: Historical Trends (2019-2022) and Forecasted Estimates (2023-2035)

19. COLD CHAIN MARKET FOR PHARMACEUTICALS, BY KEY GEOGRAPHICAL REGIONS

19.1. Chapter Overview

19.2. Key Assumptions and Methodology

19.3. North America: Historical Trends (2019-2022) and Forecasted Estimates (2023-2035)

19.4. Europe: Historical Trends (2019-2022) and Forecasted Estimates (2023-2035)

19.5. Asia-Pacific: Historical Trends (2019-2022) and Forecasted Estimates (2023-2035)

19.6. Middle East and North America: Historical Trends (2019-2022) and Forecasted Estimates (2023-2035)

19.7. Latin America: Historical Trends (2019-2022) and Forecasted Estimates (2023-2035)

19.8. Rest of the World: Historical Trends (2019-2022) and Forecasted Estimates (2023-2035)

19.9. Data Triangulation

19.9.1. Insights from Primary Research

19.9.2. Insights from Secondary Research

19.9.3. Insights from In-house Repository

20. CONCLUSION

21. EXECUTIVE INSIGHTS

21.1. Chapter Overview

21.2. EMBALL'ISO

21.2.1. Company Snapshot

21.2.2. Interview Transcript

21.3. Tower Cold Chain

21.3.1. Company Snapshot

21.3.2. Interview Transcript

22. APPENDIX 1: TABULATED DATA

23. APPENDIX 2: LIST OF COMPANIES AND ORGANIZATIONS

I would like to order

Product name: Cold Chain Market for Pharmaceuticals: Distribution by Type of Primary Packaging (Vials, Ampoules, Pre-filled Syringes and Bags), Type of Secondary Packaging (Cold Boxes, Vaccine Carriers and Insulated Containers), Type of Usability (Reusable and Single-use) and Key Geographical Regions (North America, Europe, Asia-Pacific, Middle East and North Africa, Latin America and Rest of the World): Historical Trends (2019-2022) and Forecasted Estimates (2023-2035)

Product link: <https://marketpublishers.com/r/C3A03357263EEN.html>

Price: US\$ 4,799.00 (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/C3A03357263EEN.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