

GLOBAL PHASE CHANGE MATERIAL MARKET FORECAST 2017 TO 2025

<https://marketpublishers.com/r/G494509225AEN.html>

Date: February 2017

Pages: 105

Price: US\$ 2,500.00 (Single User License)

ID: G494509225AEN

Abstracts

KEY FINDINGS

The global phase change material market is anticipated to expand \$4023.63 Million by 2025, at a CAGR of 20.09% between 2017 and 2025. The base year considered for the market study for the phase change material market is 2016. The forecast period is 2017 and 2025. There have been increasing demands from varied applications for phase change material products. The main factor of this demand is the vigilant endeavor amid the globe to conserve energy as fossil fuels are rapidly diminishing due to uncertain usage. The key factor for the growth of PCM products is the rising construction activities in the emerging nations of India, China, and Brazil. The environment-friendly legislations are consciously being framed by the government of these nations.

MARKET INSIGHTS

The global phase change material market is segmented on the basis of type, application, and geography. The phase change material by type market is further divided into paraffin, salt hydrates, and others. The application segment in the global phase change material market is further classified into building and construction, energy storage, HVAC, textiles, shipping and transportation and other applications. The phase change material market by geography is further bifurcated into North America, Europe, and Asia-Pacific. Energy preservation, reducing the emissions of greenhouse gas, benefits of PCM's high thermal mass, operation over a long period of time, the extensive sphere of melting temperatures, and dominance on peak load are some of the key factors driving the global phase change material market.

REGIONAL INSIGHTS

The global phase change material market by geography is segmented into North America, Europe and Asia-Pacific and rest of the world. Europe is the largest market in the phase change material market globally. The major reasons for the market growth in this region are a rise in the awareness in regard to PCM products advantage, stringent government regulations concerning energy reduction and efficiency of greenhouse gasses. North America is the leading market for PCM after Europe. Increasing demand for these products in energy storage and HVAC are encouraging the market growth in this region. The PCM market in Asia-Pacific is estimated to show a steady growth mainly because of rising building and construction industry and rapid urbanization.

COMPETITIVE ANALYSIS

Henkel, DuPont BASF, Entropy Solutions, CSafe Global, Outlast Technologies, and Dow Chemicals are some of the major players in the global phase change material market. For almost all the applications exclusive products were launched. Prominent among them were cold storage, textiles, and packaging. The common marketing strategy considered by most of the player in the PCM market to position their products includes advertising them as eco-friendly and economical and energy efficient. Investments, divestments, acquisitions and Joint ventures were the preferred strategies in the PCM market, with the key players integrating with research institutes and universities to evolve new products, raise the latent heat of the product and estimate phase change temperature options.

Contents

1. RESEARCH SCOPE

- 1.1. MARKET DEFINITION
- 1.2. STUDY GOALS
- 1.3. SCOPE OF THE MARKET STUDY
- 1.4. WHO WILL FIND THIS REPORT USEFUL?
- 1.5. STUDY AND FORECASTING YEARS

2. RESEARCH METHODOLOGY

- 2.1. SOURCES OF DATA
 - 2.1.1. PRIMARY SOURCES
 - 2.1.2. SECONDARY SOURCES
- 2.2. MARKET SIZE ESTIMATION
- 2.3. DATA TRIANGULATION
- 2.4. ASSUMPTIONS

3. EXECUTIVE SUMMARY

- 3.1. INNOVATIVE APPLICATIONS OF PHASE CHANGE MATERIALS
 - 3.1.1. PHASE-CHANGE MEMORY
 - 3.1.2. NANOSCALE SWITCHING
 - 3.1.3. GLAZIN

4. MARKET OVERVIEW

- 4.1. MARKET DRIVERS
 - 4.1.1. CONSERVATION OF ENERGY
 - 4.1.2. REDUCTION OF GREENHOUSE GAS EMISSIONS
 - 4.1.3. OPERATION OVER A LONG PERIOD OF TIME
 - 4.1.4. ADVANTAGE OF PCMS' HIGH THERMAL MASS
 - 4.1.5. WIDE RANGE OF MELTING TEMPERATURES
 - 4.1.6. INFLUENCE ON PEAK LOAD
- 4.2. MARKET RESTRAINTS
 - 4.2.1. HIGH COST OF PCMS
 - 4.2.2. LACK OF INFORMATION ON PCMS
 - 4.2.3. THE DISADVANTAGE OF CHARACTERISTICS SUCH AS FLAMMABILITY,

CORROSION, OVERHEATING AND VOLUME EXPANSION

4.2.4. LIMITED APPLICATION IN TEMPERATE TEMPERATURES

4.3. MARKET OPPORTUNITIES

4.3.1. DEVELOPMENT AND COMMERCIALIZATION OF BIO-BASED PCMS

4.3.2. REDUCTION IN THE PRICE OF PCMS

4.3.3. INNOVATION

4.3.4. R&D INITIATIVES IN BUILDING, CONSTRUCTION, AND TEXTILES

5. MARKET SEGMENTATION

5.1. BY TYPE

5.1.1. PARAFFIN

5.1.2. SALT HYDRATES

5.1.3. OTHERS

5.2. BY APPLICATION

5.2.1. BUILDING AND CONSTRUCTION

5.2.2. COMMERCIAL REFRIGERATION

5.2.3. HVAC

5.2.4. ENERGY STORAGE

5.2.5. SHIPPING AND TRANSPORTATION

5.2.6. TEXTILES

5.2.7. OTHER APPLICATIONS

6. KEY ANALYTICAL

6.1. VALUE CHAIN ANALYSIS

6.2. PCM BUSINESS ARCHITECTURE ANALYSIS

6.3. PCM MATERIALS: TEMPERATURE ANALYSIS

7. REGIONAL ANALYSIS

7.1. NORTH AMERICA

7.2. EUROPE

7.3. ASIA-PACIFIC

7.4. REST OF THE WORLD (ROW)

8. COMPETITIVE LANDSCAPE

8.1. GROWTH STRATEGIES, BY PLAYERS

8.2. COMPANY PROFILES

- 8.2.1. ADVANSA B.V.
- 8.2.2. AI TECHNOLOGY INC.
- 8.2.3. ASTER PVT LTD
- 8.2.4. BASF
- 8.2.5. CHOMERICS
- 8.2.6. CLIMATOR SWEDEN AB
- 8.2.7. COSELLA-DÖRKEN
- 8.2.8. CRODA INTERNATIONAL PLC
- 8.2.9. CSAFE GLOBAL
- 8.2.10. DATUM PHASE CHANGE LTD.
- 8.2.11. DOW CHEMICAL COMPANY
- 8.2.12. DUPONT
- 8.2.13. ENTROPY SOLUTIONS INC.
- 8.2.14. HENKEL
- 8.2.15. KAPLAN ENERGY
- 8.2.16. AAVID KUNZE GMBH
- 8.2.17. LAIRD TECHNOLOGIES
- 8.2.18. LAMINAR MEDICA LIMITED
- 8.2.19. MICRON
- 8.2.20. MICROTEK LABORATORIES INC.
- 8.2.21. NATIONAL GYPSUM
- 8.2.22. OUTLAST TECHNOLOGIES
- 8.2.23. PHASE CHANGE MATERIAL PRODUCTS LTD.
- 8.2.24. PHASE CHANGE ENERGY SOLUTIONS
- 8.2.25. PHASE CHANGE PRODUCTS PTY LTD.
- 8.2.26. PLUS POLYMERS
- 8.2.27. RUBITHERM TECHNOLOGIES
- 8.2.28. SHENZHEN AOCHUAN TECHNOLOGY CO. LTD.
- 8.2.29. SHIN-ETSU CHEMICAL CO. LTD.
- 8.2.30. TCP RELIABLE
- 8.2.31. VESTURE CORP

List Of Tables

LIST OF TABLES

TABLE 1 NEW PRODUCT DEVELOPMENT AND R&D

TABLE 2 TEMPERATURE ANALYSIS OF COMMONLY USED PARAFFIN-BASED PHASE CHANGE MATERIALS (°C)

TABLE 3 TEMPERATURE ANALYSIS OF COMMONLY USED SALT HYDRATE-BASED PHASE CHANGE MATERIALS (°C)

TABLE 4 TEMPERATURE ANALYSIS OF COMMONLY USED FATTY ACID- OR BIO-BASED PHASE CHANGE MATERIALS (°C)

TABLE 5 REPRODUCIBILITY SPECIFIED BY CYCLING CATEGORIES

TABLE 6 GLOBAL PARAFFIN BASED PCM'S MARKET BY REGION, 2017-2025, (IN \$ MILLION)

TABLE 7 GLOBAL SALT HYDRATES BASED PCM'S MARKET BY REGION, 2017-2025, (IN \$ MILLION)

TABLE 8 GLOBAL OTHER TYPE OF PCM'S MARKET BY REGION, 2017-2025, (IN \$ MILLION)

TABLE 9 GLOBAL BUILDING AND CONSTRUCTION MARKET BY REGION, 2017-2025, (IN \$ MILLION)

TABLE 10 GLOBAL COMMERCIAL REFRIGERATION MARKET BY REGION, 2017-2025, (IN \$ MILLION)

TABLE 11 GLOBAL HVAC MARKET BY REGION, 2017-2025, (IN \$ MILLION)

TABLE 12 COMMERCIALLY AVAILABLE PHASE CHANGE MATERIALS FOR ENERGY STORAGE

TABLE 13 SOLAR PV INSTALLED CAPACITY ESTIMATE AND FORECAST, 2012–2019 (GW)

TABLE 14 GLOBAL ENERGY STORAGE MARKET BY REGION, 2017-2025, (IN \$ MILLION)

TABLE 15 GLOBAL SHIPPING AND TRANSPORTATION MARKET BY REGION, 2017-2025, (IN \$ MILLION)

TABLE 16 GLOBAL TEXTILES MARKET BY REGION, 2017-2025, (IN \$ MILLION)

TABLE 17 GLOBAL OTHER APPLICATIONS MARKET BY REGION, 2017-2025, (IN \$ MILLION)

TABLE 18 EMISSION AND ENERGY CONSERVATION NORMS

TABLE 19 ENERGY CONSUMPTION IN THE U.S., BY SECTOR (%)

TABLE 20 ENERGY CONSUMPTION IN RESIDENTIAL BUILDINGS AND COMMERCIAL BUILDINGS IN 2016 (%)

TABLE 21 ENERGY CONSUMPTION IN EUROPE BY SECTOR, 2014 (%)

TABLE 22 PRODUCT LAUNCHES AND R&D IN THE PCM MARKET

TABLE 23 DIVESTMENT/INVESTMENT/ACQUISITIONS/JOINT VENTURES IN THE
PCM MARKET

TABLE 24 AGREEMENTS AND EXPANSION IN THE PCM MARKET

List Of Figures

LIST OF FIGURES

FIGURE 1 MARKET SIZE ESTIMATION

FIGURE 2 DATA TRIANGULATION

FIGURE 3 GLOBAL PHASE CHANGE MATERIALS MARKET, 2017-2025, (IN \$MILLION)

FIGURE 4 BUSINESS ARCHITECTURE OF THE PHASE CHANGE MATERIALS MARKET

FIGURE 5 GLOBAL PARAFFIN BASED PCM'S MARKET, 2017-2025, (IN \$ MILLION)

FIGURE 6 GLOBAL SALT HYDRATES BASED PCM'S MARKET, 2017-2025, (IN \$ MILLION)

FIGURE 7 GLOBAL OTHER TYPE OF PCM'S MARKET, 2017-2025, (IN \$ MILLION)

FIGURE 8 GLOBAL BUILDING AND CONSTRUCTION MARKET, 2017-2025, (IN \$ MILLION)

FIGURE 9 GLOBAL COMMERCIAL REFRIGERATION MARKET, 2017-2025, (IN \$ MILLION)

FIGURE 10 GLOBAL HVAC MARKET, 2017-2025, (IN \$ MILLION)

FIGURE 11 GLOBAL ENERGY STORAGE MARKET, 2017-2025, (IN \$ MILLION)

FIGURE 12 GLOBAL SHIPPING AND TRANSPORTATION MARKET, 2017-2025, (IN \$ MILLION)

FIGURE 13 GLOBAL TEXTILES MARKET, 2017-2025, (IN \$ MILLION)

FIGURE 14 GLOBAL OTHER APPLICATIONS MARKET, 2017-2025, (IN \$ MILLION)

FIGURE 15 GLOBAL PHASE CHANGE MATERIALS MARKET SHARE, BY REGION, 2017

FIGURE 16 NORTH AMERICA PHASE CHANGE MATERIALS MARKET, 2017-2025, (IN \$ MILLION)

FIGURE 17 EUROPE PHASE CHANGE MATERIALS MARKET, 2017-2025, (IN \$ MILLION)

FIGURE 18 ASIA-PACIFIC PHASE CHANGE MATERIALS MARKET, 2017-2025 (IN \$MILLION)

FIGURE 19 ROW PHASE CHANGE MATERIALS MARKET, 2017-2025 (IN \$MILLION)

I would like to order

Product name: GLOBAL PHASE CHANGE MATERIAL MARKET FORECAST 2017 TO 2025

Product link: <https://marketpublishers.com/r/G494509225AEN.html>

Price: US\$ 2,500.00 (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/G494509225AEN.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