+357 96 030922
info@marketpublishers.com

Global Phase Change Material Coolant Market 2025 by Manufacturers, Regions, Type and Application, Forecast to 2031

https://marketpublishers.com/r/GBBE90D3B17CEN.html
Date: November 2025
Pages: 111
Price: US$ 3,480.00 (Single User License)
ID: GBBE90D3B17CEN

Abstracts

According to our (Global Info Research) latest study, the global Phase Change Material Coolant market size was valued at US$ million in 2024 and is forecast to a readjusted size of USD million by 2031 with a CAGR of %during review period.

In this report, we will assess the current U.S. tariff framework alongside international policy adaptations, analyzing their effects on competitive market structures, regional economic dynamics, and supply chain resilience.

Phase change material coolant, as the name implies, refers to a liquid that uses phase change materials (PCM) as a cooling medium. Phase change materials are substances that can undergo phase changes (such as from solid to liquid, or from liquid to solid) at a specific temperature and absorb or release a large amount of latent heat in the process. This unique property gives phase change materials a significant advantage in the field of coolants.

During the phase change process, the temperature of the phase change material remains almost unchanged, but it can absorb or release a large amount of heat. This property is called latent heat. When the phase change material is used as a coolant, it can maintain a stable temperature while absorbing heat, thereby effectively controlling the temperature of the object being cooled. Phase change material coolants are widely used in fields that require efficient thermal management, such as new energy vehicles, data centers, and electronic equipment heat dissipation.

The development status and dynamics of the phase change material coolant market can be summarized from the following aspects:

+357 96 030922
info@marketpublishers.com

First, with the acceleration of industrialization and the improvement of global requirements for energy conservation and environmental protection, the phase change material coolant market has shown a growth trend. Phase change materials are widely used in the field of coolants due to their unique properties, such as the ability to change the state of matter and absorb or release a large amount of latent heat without changing the temperature, to improve cooling efficiency and energy utilization. Phase change material coolants are mainly used in the fields of automobiles, machinery, electricity, chemicals, etc., especially in high energy consumption and high heat dissipation demand occasions such as new energy vehicles and data centers. These fields have higher and higher performance requirements for coolants, which has promoted the development of the phase change material coolant market.

In addition, technological innovation is a key factor in promoting the development of the phase change material coolant market. Enterprises continue to develop new phase change materials, optimize coolant formulas, and improve cooling efficiency and service life to meet the needs of different fields. With the improvement of environmental awareness and the increasingly stringent environmental regulations, the market demand for environmentally friendly coolants continues to increase. Phase change material coolants, as a new type of environmentally friendly product, have the characteristics of non-toxic, harmless, and degradable, which meets the requirements of green development.

Phase change material coolants can be divided into low-temperature phase change material coolants, medium-temperature phase change material coolants and high-temperature phase change material coolants according to the phase change temperature.

The phase change temperature of low-temperature phase change material coolants is generally lower than 100°C, and common ones include hydrated salts, paraffin, etc. It is widely used in textiles, refrigeration equipment and other fields.

The phase change temperature range of medium-temperature phase change material coolants is between 100°C and 200°C, and it is mainly composed of organic matter and polymer materials. It is widely used in construction, mobile thermal storage technology and solar thermal storage and other fields.

The phase change temperature range of high-temperature phase change material coolants is between 200°C and 2000°C, and it is used in aerospace and military fields.

+357 96 030922
info@marketpublishers.com

Phase change material coolants

The upstream is the raw material supplier, providing the main raw materials of coolants such as phase change materials, ethylene glycol, and glycerin

The midstream is the coolant manufacturer, which processes and mixes the raw materials to make phase change material coolant products that meet the requirements.

The downstream is mainly data centers and new energy vehicle manufacturers, which need to use phase change material coolants for thermal management and cooling.

In summary, the phase change material coolant market has broad development prospects and huge market potential.

This report is a detailed and comprehensive analysis for global Phase Change Material Coolant market. Both quantitative and qualitative analyses are presented by manufacturers, by region & country, by Type and by Application. As the market is constantly changing, this report explores the competition, supply and demand trends, as well as key factors that contribute to its changing demands across many markets. Company profiles and product examples of selected competitors, along with market share estimates of some of the selected leaders for the year 2025, are provided.

Key Features:

Global Phase Change Material Coolant market size and forecasts, in consumption value ($ Million), sales quantity (Tons), and average selling prices (US$/kg), 2020-2031

Global Phase Change Material Coolant market size and forecasts by region and country, in consumption value ($ Million), sales quantity (Tons), and average selling prices (US$/kg), 2020-2031

Global Phase Change Material Coolant market size and forecasts, by Type and by Application, in consumption value ($ Million), sales quantity (Tons), and average selling prices (US$/kg), 2020-2031

Global Phase Change Material Coolant market shares of main players, shipments in revenue ($ Million), sales quantity (Tons), and ASP (US$/kg), 2020-2025

+357 96 030922
info@marketpublishers.com

The Primary Objectives in This Report Are:

To determine the size of the total market opportunity of global and key countries
To assess the growth potential for Phase Change Material Coolant
To forecast future growth in each product and end-use market
To assess competitive factors affecting the marketplace

This report profiles key players in the global Phase Change Material Coolant market based on the following parameters - company overview, sales quantity, revenue, price, gross margin, product portfolio, geographical presence, and key developments. Key companies covered as a part of this study include Chemours, PCM Products, Phase Change Solutions, Microtek Laboratories?, ExxonMobil, Shell, Zhejiang Juhua, Lanyang Technology, Zhejiang Noah Fluorine Chemicals, Shanghai Ruyi Environmental Technology, etc.
This report also provides key insights about market drivers, restraints, opportunities, new product launches or approvals.

Market Segmentation

Phase Change Material Coolant market is split by Type and by Application. For the period 2020-2031, the growth among segments provides accurate calculations and forecasts for consumption value by Type, and by Application in terms of volume and value. This analysis can help you expand your business by targeting qualified niche markets.

Market segment by Type

Organic

Inorganic

Compound

Market segment by Application

New Energy Vehicles

Data Centers

+357 96 030922
info@marketpublishers.com

Electronic Equipment Cooling

Industrial Cooling

Other

Major players covered

Chemours

PCM Products

Phase Change Solutions

Microtek Laboratories?

ExxonMobil

Shell

Zhejiang Juhua

Lanyang Technology

Zhejiang Noah Fluorine Chemicals

Shanghai Ruyi Environmental Technology

Runhe High-Tech Materials

Market segment by region, regional analysis covers

North America (United States, Canada, and Mexico)
Europe (Germany, France, United Kingdom, Russia, Italy, and Rest of Europe)
Asia-Pacific (China, Japan, Korea, India, Southeast Asia, and Australia)
South America (Brazil, Argentina, Colombia, and Rest of South America)

+357 96 030922
info@marketpublishers.com

Middle East & Africa (Saudi Arabia, UAE, Egypt, South Africa, and Rest of Middle East & Africa)

The content of the study subjects, includes a total of 15 chapters:
Chapter 1, to describe Phase Change Material Coolant product scope, market overview, market estimation caveats and base year.
Chapter 2, to profile the top manufacturers of Phase Change Material Coolant, with price, sales quantity, revenue, and global market share of Phase Change Material Coolant from 2020 to 2025.
Chapter 3, the Phase Change Material Coolant competitive situation, sales quantity, revenue, and global market share of top manufacturers are analyzed emphatically by landscape contrast.
Chapter 4, the Phase Change Material Coolant breakdown data are shown at the regional level, to show the sales quantity, consumption value, and growth by regions, from 2020 to 2031.
Chapter 5 and 6, to segment the sales by Type and by Application, with sales market share and growth rate by Type, by Application, from 2020 to 2031.
Chapter 7, 8, 9, 10 and 11, to break the sales data at the country level, with sales quantity, consumption value, and market share for key countries in the world, from 2020 to 2025.and Phase Change Material Coolant market forecast, by regions, by Type, and by Application, with sales and revenue, from 2026 to 2031.
Chapter 12, market dynamics, drivers, restraints, trends, and Porters Five Forces analysis.
Chapter 13, the key raw materials and key suppliers, and industry chain of Phase Change Material Coolant.
Chapter 14 and 15, to describe Phase Change Material Coolant sales channel, distributors, customers, research findings and conclusion.

+357 96 030922
info@marketpublishers.com

Contents

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

3 COMPETITIVE ENVIRONMENT: PHASE CHANGE MATERIAL COOLANT BY MANUFACTURER

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

List Of Tables

LIST OF TABLES

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

List Of Figures

LIST OF FIGURES

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

I would like to order

Product name: Global Phase Change Material Coolant Market 2025 by Manufacturers, Regions, Type and Application, Forecast to 2031

Product link: https://marketpublishers.com/r/GBBE90D3B17CEN.html

Price: US$ 3,480.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer Service:
info@marketpublishers.com

Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page https://marketpublishers.com/r/GBBE90D3B17CEN.html