

# Battery Cooling Plate Market By Material Type (Aluminum, Copper, Graphite, Composite Materials, Others), By Technology Type (Liquid Cooling Plates, Air Cooling Plates) By Application (Electric Vehicles, Consumer Electronics, Energy Storage Systems, Others) : Global Opportunity Analysis and Industry Forecast, 2024-2033

Market Report | 2024-06-01 | 300 pages | Allied Market Research

#### **AVAILABLE LICENSES:**

- Cloud Access License \$2340.90
- Business User License \$5157.00
- Enterprise License \$6534.90

#### **Report description:**

The battery cooling plate market was valued at \$2.5 billion in 2023, and is projected to reach \$9.8 billion by 2033, growing at a CAGR of 14.9% from 2024 to 2033.

Battery cooling plate is a critical component of batteries that regulates their temperature to ensure optimal performance and safety. It plays a pivotal role in thermal management in electric vehicles and energy storage systems by dissipating the heat generated during the charging and discharging cycles of the battery, thereby preventing overheating.

The growth of the market is majorly driven by increase in demand for increase in penetration of portable electronics such as such as smartphones, laptops, tablets, and wearables. According to the estimates of Statista approximately 6.7 billion smartphone subscriptions were registered worldwide in 2023 among a global population of around 7.4 billion. Moreover, surge in adoption of electric vehicles significantly contributes toward the growth of the global market. According to the International Energy Agency, a Paris-based autonomous intergovernmental organization, over 3 million electric vehicles were sold in the first quarter of 2024, around 25% higher as compared to 2023. This number is estimated to reach 17 million by the end of 2024, exhibiting a 20% year-on-year increase. These applications require high-performance batteries, which, in turn, propel the demand for battery cooling plates. Fast charging technologies increase the rate of heat generation, requiring efficient cooling systems. These systems play a crucial role in achieving effective cooling to prevent the risk of thermal runaway, thereby improving battery efficiency and enhancing the longevity of electronic devices. However, high cost associated with not only the procurement of cooling plate materials but also the integration into existing battery systems, installation, and maintenance restrains the market growth.

Moreover, the market growth is significantly hampered by improper disposal practices of batteries that can lead to several environmental and health issues. On the contrary, implementation of supportive government initiatives for proper battery disposal is expected to offer remunerative opportunities for the expansion of the global market during the forecast period. For instance, the Government of India has implemented the Hazardous Waste Management Rules, 2016, issued under the Environmental Protection Act (EPA) of 1986, which ensure strict adherence to the disposal and recycling of lead-acid batteries in India. Furthermore, innovations in materials, such as high thermal conductivity composites, improve the efficiency and effectiveness of cooling plates, which are expected to offer remunerative opportunities for the expansion of the global market during the forecast period.

The global battery cooling plate market is segmented into material type, technology type, application, and region. Depending on material type, the market is classified into aluminum, copper, graphite, composite materials, and others. By technology type, it is divided into liquid cooling plates and air cooling plates. On the basis of application, it is segregated into electric vehicles, consumer electronics, energy storage systems, and others. Region wise, it is analyzed across North America, Europe, Asia-Pacific,

# and LAMEA.

Key Findings

By material type, the composite materials segment held the highest market share in 2023 and is likely to retain its dominance by 2033.

On the basis of technology, the liquid cooling plates segment was the major shareholder in 2023 and is expected to continue the same trend throughout the forecast period.

Depending on application, the electric vehicles segment acquired the maximum share in 2023 and is anticipated to lead the market in the coming years.

Region wise, Asia-Pacific registered the fastest growth, in terms of revenue, in 2023.

#### 

## Competition Analysis

Competitive analysis and profiles of the major players in the global battery cooling plate market include KenFa Tech, Zhejiang Sanhua Automotive Components Co., Ltd., Kingka Tech Industrial Limited, Bespoke Composite Panels, Dana Limited, ERAE Automotive, HELLA GmbH & Co. KGaA, Nippon Light Metal Holdings Co., Ltd., MAHLE GmbH, and MODINE MANUFACTURING COMPANY. These major players have adopted various key development strategies such as business expansion, new product launches, and partnerships to strengthen their foothold in the competitive market.

#### 

Additional benefits you will get with this purchase are:

- Quarterly Update and\* (only available with a corporate license, on listed price)

- 5 additional Company Profile of client Choice pre- or Post-purchase, as a free update.
- Free Upcoming Version on the Purchase of Five and Enterprise User License.

- 16 analyst hours of support\* (post-purchase, if you find additional data requirements upon review of the report, you may receive support amounting to 16 analyst hours to solve questions, and post-sale queries)

- 15% Free Customization\* (in case the scope or segment of the report does not match your requirements, 15% is equivalent to 3 working days of free work, applicable once)

- Free data Pack on the Five and Enterprise User License. (Excel version of the report)
- Free Updated report if the report is 6-12 months old or older.
- 24-hour priority response\*
- Free Industry updates and white papers.

Possible Customization with this report (with additional cost and timeline, please talk to the sales executive to know more)

- Analysis of raw material in a product (by %)
- Manufacturing Capacity
- Investment Opportunities

## Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com www.scotts-international.com

- Product Benchmarking / Product specification and applications
- Upcoming/New Entrant by Regions
- Technology Trend Analysis
- Average Consumer Expenditure
- Market share analysis of players by products/segments
- New Product Development/ Product Matrix of Key Players
- Regulatory Guidelines
- Additional company profiles with specific to client's interest
- Additional country or region analysis- market size and forecast
- Average Selling Price Analysis / Price Point Analysis
- Expanded list for Company Profiles
- Historic market data
- Import Export Analysis/Data
- Key player details (including location, contact details, supplier/vendor network etc. in excel format)
- Market share analysis of players at global/region/country level
- Product Consumption Analysis
- Volume Market Size and Forecast
- Key Market Segments

By Material Type

- Aluminum
- Copper
- Graphite
- Composite Materials
- Others

By Technology Type

- Liquid Cooling Plates
- Air Cooling Plates
- By Application
- Electric Vehicles
- Consumer Electronics
- Energy Storage Systems
- Others
- By Region
- North America
- U.S.
- Canada
- Mexico
- Europe
- France
- Germany
- Italy
- Spain
- UK
- Rest of Europe
- Asia-Pacific
- China
- Japan
- Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com www.scotts-international.com

- India
- South Korea
- Australia
- Rest of Asia-Pacific
- LAMEA
- Brazil
- South Africa
- Saudi Arabia
- Rest of LAMEA
- Key Market Players
- KenFa Tech
- Zhejiang Sanhua Automotive Components Co., Ltd.
- Kingka Tech Industrial Limited
- Bespoke Composite Panels
- Dana Limited
- ERAE Automotive
- HELLA GmbH & Co. KGaA
- Nippon Light Metal Holdings Co., Ltd.
- MAHLE GmbH
- MODINE MANUFACTURING COMPANY

## Table of Contents:

- CHAPTER 1: INTRODUCTION
- 1.1. Report Description
- 1.2. Key Market Segments
- 1.3. Key Benefits
- 1.4. Research Methodology
- 1.4.1. Primary Research
- 1.4.2. Secondary Research
- 1.4.3. Analyst Tools and Models
- CHAPTER 2: EXECUTIVE SUMMARY
- 2.1. CXO Perspective
- CHAPTER 3: MARKET LANDSCAPE
- 3.1. Market Definition and Scope
- 3.2. Key Findings
- 3.2.1. Top Investment Pockets
- 3.2.2. Top Winning Strategies
- 3.3. Porter's Five Forces Analysis
- 3.3.1. Bargaining Power of Suppliers
- 3.3.2. Threat of New Entrants
- 3.3.3. Threat of Substitutes
- 3.3.4. Competitive Rivalry
- 3.3.5. Bargaining Power among Buyers
- 3.5. Market Dynamics
- 3.5.1. Drivers
- 3.5.2. Restraints
- 3.5.3. Opportunities

CHAPTER 4: SPRAY POLYUREA ELASTOMER (SPUA) MARKET, BY TYPE

- 4.1. Market Overview
- 4.1.1 Market Size and Forecast, By Type
- 4.2. Universal
- 4.2.1. Key Market Trends, Growth Factors and Opportunities
- 4.2.2. Market Size and Forecast, By Region
- 4.2.3. Market Share Analysis, By Country
- 4.3. Waterproof
- 4.3.1. Key Market Trends, Growth Factors and Opportunities
- 4.3.2. Market Size and Forecast, By Region
- 4.3.3. Market Share Analysis, By Country
- CHAPTER 5: SPRAY POLYUREA ELASTOMER (SPUA) MARKET, BY APPLICATION
- 5.1. Market Overview
- 5.1.1 Market Size and Forecast, By Application
- 5.2. Industrial Anti-Corrosion
- 5.2.1. Key Market Trends, Growth Factors and Opportunities
- 5.2.2. Market Size and Forecast, By Region
- 5.2.3. Market Share Analysis, By Country
- 5.3. Building Waterproofing
- 5.3.1. Key Market Trends, Growth Factors and Opportunities
- 5.3.2. Market Size and Forecast, By Region
- 5.3.3. Market Share Analysis, By Country
- 5.4. Wear-Resistant Lining
- 5.4.1. Key Market Trends, Growth Factors and Opportunities
- 5.4.2. Market Size and Forecast, By Region
- 5.4.3. Market Share Analysis, By Country
- 5.5. Others
- 5.5.1. Key Market Trends, Growth Factors and Opportunities
- 5.5.2. Market Size and Forecast, By Region
- 5.5.3. Market Share Analysis, By Country
- CHAPTER 6: SPRAY POLYUREA ELASTOMER (SPUA) MARKET, BY REGION
- 6.1. Market Overview
- 6.1.1 Market Size and Forecast, By Region
- 6.2. North America
- 6.2.1. Key Market Trends and Opportunities
- 6.2.2. Market Size and Forecast, By Type
- 6.2.3. Market Size and Forecast, By Application
- 6.2.4. Market Size and Forecast, By Country
- 6.2.5. U.S. Spray Polyurea Elastomer (SPUA) Market
- 6.2.5.1. Market Size and Forecast, By Type
- 6.2.5.2. Market Size and Forecast, By Application
- 6.2.6. Canada Spray Polyurea Elastomer (SPUA) Market
- 6.2.6.1. Market Size and Forecast, By Type
- 6.2.6.2. Market Size and Forecast, By Application
- 6.2.7. Mexico Spray Polyurea Elastomer (SPUA) Market
- 6.2.7.1. Market Size and Forecast, By Type
- 6.2.7.2. Market Size and Forecast, By Application

6.3. Europe 6.3.1. Key Market Trends and Opportunities 6.3.2. Market Size and Forecast, By Type 6.3.3. Market Size and Forecast, By Application 6.3.4. Market Size and Forecast, By Country 6.3.5. France Spray Polyurea Elastomer (SPUA) Market 6.3.5.1. Market Size and Forecast, By Type 6.3.5.2. Market Size and Forecast, By Application 6.3.6. Germany Spray Polyurea Elastomer (SPUA) Market 6.3.6.1. Market Size and Forecast, By Type 6.3.6.2. Market Size and Forecast, By Application 6.3.7. Italy Spray Polyurea Elastomer (SPUA) Market 6.3.7.1. Market Size and Forecast, By Type 6.3.7.2. Market Size and Forecast, By Application 6.3.8. Spain Spray Polyurea Elastomer (SPUA) Market 6.3.8.1. Market Size and Forecast, By Type 6.3.8.2. Market Size and Forecast, By Application 6.3.9. UK Spray Polyurea Elastomer (SPUA) Market 6.3.9.1. Market Size and Forecast, By Type 6.3.9.2. Market Size and Forecast, By Application 6.3.10. Rest of Europe Spray Polyurea Elastomer (SPUA) Market 6.3.10.1. Market Size and Forecast, By Type 6.3.10.2. Market Size and Forecast, By Application 6.4. Asia-Pacific 6.4.1. Key Market Trends and Opportunities 6.4.2. Market Size and Forecast, By Type 6.4.3. Market Size and Forecast, By Application 6.4.4. Market Size and Forecast, By Country 6.4.5. China Spray Polyurea Elastomer (SPUA) Market 6.4.5.1. Market Size and Forecast, By Type 6.4.5.2. Market Size and Forecast, By Application 6.4.6. Japan Spray Polyurea Elastomer (SPUA) Market 6.4.6.1. Market Size and Forecast, By Type 6.4.6.2. Market Size and Forecast, By Application 6.4.7. India Spray Polyurea Elastomer (SPUA) Market 6.4.7.1. Market Size and Forecast, By Type 6.4.7.2. Market Size and Forecast, By Application 6.4.8. South Korea Spray Polyurea Elastomer (SPUA) Market 6.4.8.1. Market Size and Forecast, By Type 6.4.8.2. Market Size and Forecast, By Application

6.4.9. Australia Spray Polyurea Elastomer (SPUA) Market

6.4.9.1. Market Size and Forecast, By Type

6.4.9.2. Market Size and Forecast, By Application

6.4.10. Rest of Asia-Pacific Spray Polyurea Elastomer (SPUA) Market

6.4.10.1. Market Size and Forecast, By Type

6.4.10.2. Market Size and Forecast, By Application

6.5. LAMEA

6.5.1. Key Market Trends and Opportunities 6.5.2. Market Size and Forecast, By Type 6.5.3. Market Size and Forecast, By Application 6.5.4. Market Size and Forecast, By Country 6.5.5. Brazil Spray Polyurea Elastomer (SPUA) Market 6.5.5.1. Market Size and Forecast, By Type 6.5.5.2. Market Size and Forecast, By Application 6.5.6. South Africa Spray Polyurea Elastomer (SPUA) Market 6.5.6.1. Market Size and Forecast, By Type 6.5.6.2. Market Size and Forecast, By Application 6.5.7. Saudi Arabia Spray Polyurea Elastomer (SPUA) Market 6.5.7.1. Market Size and Forecast, By Type 6.5.7.2. Market Size and Forecast, By Application 6.5.8. UAE Spray Polyurea Elastomer (SPUA) Market 6.5.8.1. Market Size and Forecast, By Type 6.5.8.2. Market Size and Forecast, By Application 6.5.9. Rest of LAMEA Spray Polyurea Elastomer (SPUA) Market 6.5.9.1. Market Size and Forecast, By Type 6.5.9.2. Market Size and Forecast, By Application CHAPTER 7: COMPETITIVE LANDSCAPE 7.1. Introduction 7.2. Top Winning Strategies 7.3. Product Mapping of Top 10 Player 7.4. Competitive Dashboard 7.5. Competitive Heatmap 7.6. Top Player Positioning, 2023 **CHAPTER 8: COMPANY PROFILES** 8.1. Johnson Fine Chemical Co. 8.1.1. Company Overview 8.1.2. Key Executives 8.1.3. Company Snapshot 8.1.4. Operating Business Segments 8.1.5. Product Portfolio 8.1.6. Business Performance 8.1.7. Key Strategic Moves and Developments 8.2. Taiwan PU Corporation 8.2.1. Company Overview 8.2.2. Key Executives 8.2.3. Company Snapshot 8.2.4. Operating Business Segments 8.2.5. Product Portfolio 8.2.6. Business Performance 8.2.7. Key Strategic Moves and Developments 8.3. Pearl Polyurethane Systems LLC 8.3.1. Company Overview 8.3.2. Key Executives 8.3.3. Company Snapshot

- 8.3.4. Operating Business Segments
- 8.3.5. Product Portfolio
- 8.3.6. Business Performance
- 8.3.7. Key Strategic Moves and Developments
- 8.4. Shundi New Material (Shanghai) Co., Ltd
- 8.4.1. Company Overview
- 8.4.2. Key Executives
- 8.4.3. Company Snapshot
- 8.4.4. Operating Business Segments
- 8.4.5. Product Portfolio
- 8.4.6. Business Performance
- 8.4.7. Key Strategic Moves and Developments
- 8.5. Specialty Products (SPI)
- 8.5.1. Company Overview
- 8.5.2. Key Executives
- 8.5.3. Company Snapshot
- 8.5.4. Operating Business Segments
- 8.5.5. Product Portfolio
- 8.5.6. Business Performance
- 8.5.7. Key Strategic Moves and Developments
- 8.6. Nukote Coating Systems
- 8.6.1. Company Overview
- 8.6.2. Key Executives
- 8.6.3. Company Snapshot
- 8.6.4. Operating Business Segments
- 8.6.5. Product Portfolio
- 8.6.6. Business Performance
- 8.6.7. Key Strategic Moves and Developments
- 8.7. PPG Industries, Inc.
- 8.7.1. Company Overview
- 8.7.2. Key Executives
- 8.7.3. Company Snapshot
- 8.7.4. Operating Business Segments
- 8.7.5. Product Portfolio
- 8.7.6. Business Performance
- 8.7.7. Key Strategic Moves and Developments
- 8.8. Futura Europe
- 8.8.1. Company Overview
- 8.8.2. Key Executives
- 8.8.3. Company Snapshot
- 8.8.4. Operating Business Segments
- 8.8.5. Product Portfolio
- 8.8.6. Business Performance
- 8.8.7. Key Strategic Moves and Developments
- 8.9. SWD POLYURETHANE (SHANGHAI) CO., LTD
- 8.9.1. Company Overview
- 8.9.2. Key Executives

- 8.9.3. Company Snapshot
- 8.9.4. Operating Business Segments
- 8.9.5. Product Portfolio
- 8.9.6. Business Performance
- 8.9.7. Key Strategic Moves and Developments
- 8.10. Perflex Group
- 8.10.1. Company Overview
- 8.10.2. Key Executives
- 8.10.3. Company Snapshot
- 8.10.4. Operating Business Segments
- 8.10.5. Product Portfolio
- 8.10.6. Business Performance
- 8.10.7. Key Strategic Moves and Developments



# Battery Cooling Plate Market By Material Type (Aluminum, Copper, Graphite, Composite Materials, Others), By Technology Type (Liquid Cooling Plates, Air Cooling Plates) By Application (Electric Vehicles, Consumer Electronics, Energy Storage Systems, Others) : Global Opportunity Analysis and Industry Forecast, 2024-2033

Market Report | 2024-06-01 | 300 pages | Allied Market Research

To place an Order with Scotts International:

- Print this form
- Complete the relevant blank fields and sign
- Send as a scanned email to support@scotts-international.com

#### **ORDER FORM:**

Select license	License	Price
	Cloud Access License	\$2340.90
	Business User License	\$5157.00
	Enterprise License	\$6534.90
	VA	π
	Tot	al

\*Please circle the relevant license option. For any questions please contact support@scotts-international.com or 0048 603 394 346. []\*\* VAT will be added at 23% for Polish based companies, individuals and EU based companies who are unable to provide a valid EU Vat Numbers.

Email*	Phone*	
First Name*	Last Name*	
Job title*		
Company Name*	EU Vat / Tax ID / NIP	number*

Address*	City*	
Zip Code*	Country*	
	Date	2025-05-09
	Signature	