

Immersion Cooling Fluids Market by Type (Mineral Oil, Fluorocarbon-based Fluids, Synthetic Fluids), End Use (Transformers, Data Centers, EV Batteries, Solar PV), Technology (Single-Phase Cooling, Two-Phase Cooling) & Region - Global Forecast to 2030

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Abstracts

The Immersion cooling fluids market is estimated to be USD 1.8 billion in 2023 and is projected to reach USD 3.2 billion by 2030, at a CAGR of 8.2% from 2023 to 2030. A primary driving factor for the growth of the immersion cooling fluids market is the increasing adoption of immersion cooling technology in various industries, particularly in data centers and high-performance computing (HPC) environments.

“By type, the synthetic fluids is estimated to be the fastest growing segment of the immersion cooling fluids market from 2023 to 2030.”

By type, synthetic fluids are estimated to be the largest segment in the immersion cooling fluids market in 2022. The environmental sustainability of synthetic fluids contributes to the market's growth, aligning with the increasing focus on green technologies and corporate responsibility. Unlike some traditional cooling fluids, synthetic fluids are often engineered to be non-toxic, non-flammable, and environmentally friendly, minimizing the ecological impact. This aspect becomes increasingly important as businesses and data center operators seek solutions that are both technologically advanced and environmentally conscious.

“By end-use, the EV batteries is estimated to be the fastest growing segment of the immersion cooling fluids market from 2023 to 2030.”

By end-use, the EV batteries segment is to be the fastest growing segment of the

immersion cooling fluids market. The growth of the electric vehicle (EV) batteries segment is influencing the immersion cooling fluids market, presenting new opportunities for the application of these specialized fluids. As the electric vehicle market expands globally, the demand for advanced thermal management solutions in EV batteries becomes increasingly critical. Immersion cooling fluids play a pivotal role in maintaining optimal operating temperatures within EV batteries, ensuring efficient performance and longevity.

“Asia Pacific immersion cooling fluids market is projected to witness the greatest during the forecast period.”

During the forecast period, Asia Pacific is projected to be the most significant market for immersion cooling fluids. The immersion cooling fluids market in the Asia-Pacific region is experiencing robust growth driven by the expansion of data center infrastructure, a focus on energy efficiency and sustainability, diverse climatic conditions, and the increasing adoption of advanced computing technologies. As APAC continues to be a hub for technological innovation, the immersion cooling fluids market is poised to play a crucial role in shaping the region's data center and high-performance computing landscape.

Profile break-up of primary participants for the report:

By Company Type: Tier 1 – 65%, Tier 2 – 20%, and Tier 3 – 15%

By Designation: C-level – 25%, Director Level – 30%, and Others– 45%

By Region: North America – 20%, Europe – 30%, Asia Pacific – 35%, South America – 9%, Middle East & Africa – 6%

The immersion cooling fluids market report is dominated by Nynas AB (Sweden), Ergon, Inc. (US), PetroChina Company Limited (China), APAR Industries (India), and Sinopec Lubricant Company (China), among others.

Research Coverage:

The report defines, segments, and projects the size of the immersion cooling fluids market based on type, technology, end use, and region. It strategically profiles the key players and comprehensively analyzes their market share and core competencies. It

also tracks and analyzes competitive developments such as expansions, product launches, partnerships, collaborations, agreements, and joint ventures undertaken by them in the market.

The report also provides a comprehensive review of market drivers, restraints, opportunities, and challenges in the immersion cooling fluids market. The report also covers qualitative aspects in addition to the quantitative aspects of these markets.

Reasons to Buy the Report:

The report is expected to help the market leaders/new entrants in the market by providing them with the closest approximations of revenue numbers of the immersion cooling fluids market and its segments. This report is also expected to help stakeholders obtain an improved understanding of the competitive landscape of the market, gain insights to improve the position of their businesses and make suitable go-to-market strategies. It also enables stakeholders to understand the pulse of the market and provide them with information on key market drivers, restraints, challenges, and opportunities.

The report provides insights on the following pointers:

Analysis of key drivers (Increasing density of servers, Expansion of electric grid in Asia Pacific, Growing need for energy-efficient cooling solution, Demand for eco-friendly cooling solutions from data centers), restraints (Toxicity of fluorocarbon-based fluids, Environmental concern regarding use of mineral oil transformer), opportunities (Rising demand for biobased oils, Adoption of immersion cooling in EV batteries, Need for single-phase immersion cooling solutions for data center application), and challenges (Retrofitting of immersion cooling solutions in data centers, Fluctuation in crude oil prices) influencing the growth of the immersion cooling fluids market.

Product Development/Innovation: Detailed insights on upcoming technologies, research & development activities, and new product & service launches in the immersion cooling fluids market.

Market Development: Comprehensive information about lucrative markets – the report analyses the immersion cooling fluids market across varied regions.

Market Diversification: Exhaustive information about new products & services,

untapped geographies, recent developments, and investments in the immersion cooling fluids market.

Competitive Assessment: In-depth assessment of market shares, growth strategies, and service offerings of leading as well as other players in the immersion cooling fluids market.

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