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Refrigerants Market by Type (HFC & Blends, HFO, Isobutane, Propane, Ammonia, Carbon Dioxide), Application (Refrigeration System, Air Conditioning System, Chillers, and MAC), and Region(Asia Pacific , North America, Europe, MEA)- Global Forecast to 2028

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Abstracts

In terms of value, the refrigerants market is estimated to grow from USD 6.3 billion in 2022 to USD 9.0 billion by 2028, at a CAGR of 6.4%. The major factors contributing to the growth of the global refrigerants market are the increasing demand for consumer appliances, especially in Asia Pacific, and the growing pharmaceutical industry. The burgeoning disposable income, rising standard of living, and increasing manufacturing facilities of consumer appliances contribute to the market growth in the region. Factors restraining the growth of the refrigerants market are the increasing regulations against fluorine-containing refrigerants due to health and safety concerns. The growing use of natural refrigerants is expected to act as an opportunity for stakeholders to grow in the refrigerants market. Natural refrigerants are likely to be in high demand in the coming years, driven by the multiplying demand from domestic, industrial, and chiller applications.

“Isobutane is expected to be the second fastest-growing type of the refrigerants market, in terms of value, during the forecast period.”

Isobutane (R-600a) is a natural refrigerant used in various refrigeration applications. It is an excellent substitute for hazardous refrigerants, including R12, R13a, R22, HCF, and CFC. R-600a is a naturally occurring component in gasoline. Due to its remarkable thermodynamic performance and minimal environmental effect, isobutane R-600a has attracted significant interest recently. It is a non-toxic chemical with zero ODP and a modest potential for global warming. Due to its eco-friendly property, R-600a has

become a refrigerant gas of choice in small commercial refrigerants and domestic refrigerants.

“MAC is expected to be the fastest-growing application of the refrigerants market, in terms of value, during the forecast period.”

MAC includes air conditioning in vehicles such as cars, trucks, and buses. The commonly used refrigerant in Mobile Air Conditionings is HFC134A. Another refrigerant R-1234yf is an alternative to the R-134A refrigerant used in mac. However, some European automobile manufacturers have raised the flammability issue using R–1234yf. Apart from fluorocarbon refrigerants, HC refrigerants are also used in MAC Refrigerants such as HFC-1234yf, HCs, and carbon dioxide have GWPs below 150 and have more potential to achieve fuel efficiency as compared to the existing R–134A systems. Currently, there is no regulation for using fluorinated refrigerant gases for MAC in buses and trains.

“Asia Pacific is projected to be the fastest growing region, in terms of value, during the forecast period in the Refrigerants market.”

In terms of value, Asia Pacific dominates the global refrigerants market, with China being the largest consumer of refrigerants globally. Increased investments and a rise in the number of new manufacturing establishments make Asia Pacific a prime market for refrigerants. Increasing government projects and infrastructure development are expected to drive the demand for refrigerants in applications such as chillers, refrigerators, and freezers. Additionally, the increasing economic growth, followed by substantial investment in the consumer appliances industry, will boost the demand for refrigerants in the region. The growing population, along with industry alliances, is also expected to propel market growth in the region.

By Company Type: Tier 1 - 69%, Tier 2 - 23%, and Tier 3 - 8%

By Designation: C-Level - 23%, Director Level - 37%, and Others - 40%

By Region: North America - 32%, Europe - 21%, Asia Pacific - 28%, Middle East & Africa - 12%, South America – 7%

The key players in this market include Arkema S.A. (France), Daikin Industries Ltd. (Japan), Honeywell International Inc. (US), The Chemours Company (US), The Linde

Group (Ireland), and Air Liquide (France) among others.

Research Coverage

This report segments the market for refrigerants based on type, application, and region and provides estimations of value (USD million) and volume (Kiloton) for the overall market size across various regions. A detailed analysis of key industry players has been conducted to provide insights into their business overviews, services, key strategies, associated with the market for refrigerants.

Reasons to Buy this Report

This research report is focused on various levels of analysis — industry analysis (industry trends), market share analysis of top players, and company profiles, which together provide an overall view on the competitive landscape; emerging and high-growth segments of the refrigerants market; high-growth regions; and market drivers, restraints, and opportunities.

The report provides insights on the following pointers:

Market Penetration: Comprehensive information on refrigerants offered by top players in the global market

Analysis of key drives: (growth in automotive sector, demand from medical application, and growing healthcare expenditure and favorable reimbursement scenario), restraints (high initial and maintenance cost of machine), opportunities (rising trend of electric vehicles), and challenges (skilled personnel for operations) influencing the growth of refrigerants market.

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

Market Development: Comprehensive information about lucrative emerging markets — the report analyzes the markets for refrigerants across regions

Market Diversification: Exhaustive information about new products, untapped regions, and recent developments in the global refrigerants market

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Competitive Assessment: In-depth assessment of market shares, strategies, products, and manufacturing capabilities of leading players in the refrigerants market

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