

Low GWP Refrigerants Market by Type (Inorganics, Hydrocarbons, Fluorocarbons), Application (Commercial Refrigeration, Industrial Refrigeration, Domestic Refrigeration), and Region (Asia Pacific, Europe, North America) - Global Forecast to 2023

<https://marketpublishers.com/r/LA2B39659F3EN.html>

Date: January 2019

Pages: 168

Price: US\$ 5,650.00 (Single User License)

ID: LA2B39659F3EN

Abstracts

The low GWP refrigerants market is projected to grow at a CAGR of 11.7% from 2018 to 2023

The low GWP refrigerants market is projected to reach USD 28.7 billion by 2023 from USD 16.5 billion in 2018, at a CAGR of 11.7% between 2018 and 2023. This growth can be attributed to the low environmental impact of low GWP refrigerants, phasing out of CFC, HCFC, and HFC refrigerants, and the increasing demand for refrigerants and air conditioners across the globe. High initial capital investments and flammability and toxicity issues related to low GWP refrigerants may restrain the growth of the low GWP refrigerants market.

Based on type, the hydrocarbon segment is expected to grow at the highest CAGR

Hydrocarbon refrigerants have excellent thermodynamic properties, and refrigerating and air-conditioning systems operating using these substances are highly energy-efficient. Hydrocarbon refrigerants are miscible with conventional refrigerating oils and have a relatively high critical temperature. They are flammable in nature and can be explosive as well; this is a major safety concern associated with the use of hydrocarbon refrigerants and therefore requires hermetically sealed systems with explosion protection for electric components.

Commercial refrigeration segment expected to be the fastest-growing application

segment

Commercial refrigeration includes cold displays, refrigerating chambers, ice machines & cold counters, and condensing units commonly used in supermarkets, shops, and centralized units. The commercial refrigeration segment is a rapidly growing sector of the low GWP refrigerants market as it is characterized by a high refrigerant leakage rate and high energy consumption.

South America is expected to be the fastest-growing low GWP refrigerants market

The South American low GWP refrigerants market is driven by development and growth in Brazil and Chile. The countries have been leading the region in terms of economic and infrastructural development and are projected to continue growing despite fluctuations in GDPs. The major end-use industries in the South American low GWP refrigerants market are infrastructure, industrial, oil & gas, and automotive.

Profile break-up of primary participants for the report:

By Company Type: Tier 1 – 42 %, Tier 2 – 25%, Tier 3 – 33%

By Designation: C level – 33%, Director level – 22%, Others – 45%

By Region: North America – 50%, Europe – 17%, Asia Pacific – 25%, Middle East & Africa – 5%, and South America – 3%

Research Coverage:

As part of the qualitative analysis, this research study provides a comprehensive review of major market drivers, restraints, opportunities, and challenges. The report defines, describes, and forecasts the low GWP refrigerants market based on type, application, and region. It provides a strategic analysis of micromarkets with respect to individual growth trends, prospects, and their contribution to the overall market.

It also discusses the competitive strategies adopted by various market players, such as Linde Group (Germany), Honeywell (US), Sinochem Group (China), Airgas Inc. (US), Engas Australasia (Australia), A-Gas (UK), Puyang Zhongwei Fine Chemical (China), Harp International (UK), and Tazzetti (Italy).

Key benefits of buying the report:

From an insight perspective, this research report has focused on various levels of analyses — industry analysis (industry trends), market share analysis of top players, supply chain analysis, and company profiles, which together comprise and discuss the basic views on the competitive landscape, emerging and high-growth segments of the low GWP refrigerants market, high-growth regions, and market drivers, restraints, and opportunities.

The report provides insights on the following pointers:

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

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

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

Market Diversification: Exhaustive information about new products, untapped geographies, recent developments, and investments in the low GWP refrigerants market

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

Contents

1 INTRODUCTION

- 1.1 OBJECTIVES OF THE STUDY
- 1.2 MARKET DEFINITION
- 1.3 SCOPE OF THE STUDY
 - 1.3.1 REGIONAL SCOPE
 - 1.3.2 MARKETS COVERED
 - 1.3.3 YEARS CONSIDERED FOR THE REPORT
- 1.4 CURRENCY & PRICING
- 1.5 STAKEHOLDERS

2 RESEARCH METHODOLOGY

- 2.1 RESEARCH DATA
 - 2.1.1 KEY DATA FROM SECONDARY SOURCES
 - 2.1.2 KEY DATA FROM PRIMARY SOURCES
 - 2.1.2.1 Key industry insights
- 2.2 MARKET SIZE ESTIMATION
- 2.3 MARKET BREAKDOWN & DATA TRIANGULATION
- 2.4 ASSUMPTIONS
- 2.5 LIMITATIONS

3 EXECUTIVE SUMMARY

4 PREMIUM INSIGHTS

- 4.1 ATTRACTIVE OPPORTUNITIES IN LOW GWP REFRIGERANTS MARKET
- 4.2 LOW GWP REFRIGERANTS MARKET, BY REGION
- 4.3 ASIA PACIFIC LOW GWP REFRIGERANTS MARKET, BY APPLICATION & COUNTRY
- 4.4 LOW GWP REFRIGERANTS MARKET, BY TYPE & REGION
- 4.5 TOP COUNTRIES IN LOW GWP REFRIGERANTS MARKET

5 MARKET OVERVIEW

- 5.1 INTRODUCTION
- 5.2 MARKET DYNAMICS

5.2.1 DRIVERS

- 5.2.1.1 Low environmental impact of low GWP refrigerants
- 5.2.1.2 Phasing out of CFC, HCFC, and HFC refrigerants in a timely manner
- 5.2.1.3 Long-term viability of low GWP refrigerants
- 5.2.1.4 Increasing demand for refrigerants and air conditioners across the globe

5.2.2 RESTRAINTS

- 5.2.2.1 High initial capital investments
- 5.2.2.2 Low global production of low GWP refrigerants
- 5.2.2.3 Flammability and toxicity issues related to low GWP refrigerants

5.2.3 OPPORTUNITIES

- 5.2.3.1 Effects of global warming
- 5.2.3.2 Low operating costs and high performance of low GWP refrigerant-based systems
- 5.2.3.3 Technological advancements for increasing performance of low GWP refrigerant-based systems

5.2.4 CHALLENGES

- 5.2.4.1 Limited availability of pure low GWP refrigerants
- 5.2.4.2 Lack of training among HVAC contractors and technicians to handle low GWP refrigerant-based systems

5.3 PORTER'S FIVE FORCES ANALYSIS

- 5.3.1 THREAT OF NEW ENTRANTS
- 5.3.2 BARGAINING POWER OF SUPPLIERS
- 5.3.3 THREAT OF SUBSTITUTES
- 5.3.4 BARGAINING POWER OF BUYERS
- 5.3.5 INTENSITY OF RIVALRY

5.4 MACROECONOMIC INDICATORS

- 5.4.1 ANNUAL GDP GROWTH OF MAJOR ECONOMIES
 - 5.4.1.1 Construction
 - 5.4.1.2 Manufacturing

5.5 POLICIES AND REGULATIONS

5.5.1 EUROPE

- 5.5.1.1 EU F-gas regulations
- 5.5.1.2 Montreal protocol
- 5.5.1.3 MAC directive
- 5.5.1.4 Denmark
- 5.5.1.5 Austria
- 5.5.1.6 Switzerland

5.5.2 NORTH AMERICA

- 5.5.2.1 Significant New Alternative Policy (SNAP) by EPA

5.5.3 ASIA PACIFIC

5.5.3.1 Japan: Revised F-gas law

5.5.3.2 China: The Foreign Economic Cooperation Office (FECO) published the first catalog of recommended substitutes for HCFCs

5.5.3.3 China: Room air conditioning industry HCFC phase-out management action plan

5.5.4 SOUTH AMERICA

5.5.4.1 Brazil: Label for commercial refrigeration under discussion

5.5.4.2 Chile: Implementation of New Minimum Energy Performance Standards (MEPS) for domestic refrigeration in 2016

6 LOW GWP REFRIGERANTS MARKET, BY TYPE

6.1 INTRODUCTION

6.2 INORGANICS

6.2.1 AMMONIA

6.2.2 CARBON DIOXIDE

6.3 OTHERS

6.3.1 WATER

6.3.2 AIR

6.4 FLUOROCARBONS

6.4.1 HYDROFLUOROOLEFINS (HFO)

6.4.2 HYDROFLUOROCARBONS (HFC)

6.5 HYDROCARBONS

6.5.1 THE DEMAND FOR HYDROCARBONS IS EXPECTED TO GROW IN NORTH AMERICA

6.5.2 PROPANE (R-290)

6.5.3 BUTANE (R-600)

6.5.4 ISO-BUTANE (R-600A)

6.5.5 OTHER HYDROCARBONS

7 LOW GWP REFRIGERANTS MARKET, BY APPLICATION

7.1 INTRODUCTION

7.2 INDUSTRIAL REFRIGERATION

7.2.1 INVESTMENTS IN INDUSTRIAL REFRIGERATION IN ASIA PACIFIC DRIVING THE MARKET

7.3 COMMERCIAL REFRIGERATION

7.3.1 EUROPE TO BE THE MAJOR MARKET FOR COMMERCIAL

REFRIGERATION

7.4 DOMESTIC REFRIGERATION

7.4.1 ASIA PACIFIC SHOWS POTENTIAL FOR DOMESTIC REFRIGERATION APPLICATION OF LOW GWP REFRIGERANTS

7.5 STATIONARY AIR CONDITIONING

7.5.1 ASIA PACIFIC TO SHOW STRONG POTENTIAL FOR STATIONARY AIR CONDITIONING APPLICATION OF LOW GWP REFRIGERANTS

7.6 MOBILE AIR CONDITIONING

7.6.1 EUROPE AND NORTH AMERICA TO SHOW HIGH POTENTIAL FOR MOBILE AIR CONDITIONING APPLICATION OF LOW GWP REFRIGERANTS

7.7 OTHERS

7.7.1 ASIA PACIFIC PROJECTED TO LEAD THE MARKET FOR OTHER APPLICATIONS

8 REGIONAL ANALYSIS

8.1 INTRODUCTION

8.2 EUROPE

8.2.1 GERMANY

8.2.2 UK

8.2.3 FRANCE

8.2.4 ITALY

8.2.5 SPAIN

8.2.6 REST OF EUROPE

8.3 ASIA PACIFIC

8.3.1 CHINA

8.3.2 JAPAN

8.3.3 INDIA

8.3.4 SOUTH KOREA

8.3.5 INDONESIA

8.3.6 THAILAND

8.3.7 SINGAPORE

8.3.8 MALAYSIA

8.3.9 REST OF ASIA PACIFIC

8.4 NORTH AMERICA

8.4.1 US

8.4.2 CANADA

8.4.3 MEXICO

8.5 MIDDLE EAST & AFRICA

- 8.5.1 SOUTH AFRICA
- 8.5.2 SAUDI ARABIA
- 8.5.3 TURKEY
- 8.5.4 REST OF MIDDLE EAST & AFRICA
- 8.6 SOUTH AMERICA
 - 8.6.1 BRAZIL
 - 8.6.2 ARGENTINA
 - 8.6.3 CHILE
 - 8.6.4 REST OF SOUTH AMERICA

9 COMPETITIVE LANDSCAPE

- 9.1 OVERVIEW
- 9.2 COMPETITIVE LEADERSHIP MAPPING, 2018
 - 9.2.1 VISIONARY LEADERS
 - 9.2.2 INNOVATORS
 - 9.2.3 DYNAMIC DIFFERENTIATORS
 - 9.2.4 EMERGING COMPANIES
- 9.3 COMPETITIVE BENCHMARKING
 - 9.3.1 STRENGTH OF PRODUCT PORTFOLIO
 - 9.3.2 BUSINESS STRATEGY EXCELLENCE
- 9.4 MARKET RANKING ANALYSIS
- 9.5 COMPETITIVE SITUATIONS & TRENDS
 - 9.5.1 NEW PRODUCT LAUNCHES & DEVELOPMENTS
 - 9.5.2 PARTNERSHIPS & CONTRACTS
 - 9.5.3 EXPANSIONS
 - 9.5.4 ACQUISITIONS & MERGERS

10 COMPANY PROFILES

(Business Overview, Products Offered, Recent Developments, SWOT Analysis, MnM View)*

- 10.1 THE LINDE GROUP
- 10.2 SINOCEM GROUP
- 10.3 AIRGAS
- 10.4 HONEYWELL
- 10.5 ENGAS AUSTRALASIA
- 10.6 HARP INTERNATIONAL

- 10.7 TAZZETTI
- 10.8 PUYANG ZHONGWEI FINE CHEMICAL
- 10.9 SHANDONG YUEON CHEMICAL INDUSTRY
- 10.10 A-GAS
- 10.11 HYCHILL AUSTRALIA
- 10.12 GTS
- 10.13 A.S. TRUST AND HOLDINGS
- 10.14 OTHER LEADING PLAYERS
 - 10.14.1 CHEMOURS
 - 10.14.2 ARKEMA
 - 10.14.3 MEXICHEM
 - 10.14.4 DAIKIN
 - 10.14.5 BROTHERS GAS
 - 10.14.6 DEEPFREEZE REFRIGERANTS
 - 10.14.7 THE NATURAL REFRIGERANTS COMPANY
 - 10.14.8 SOL SPA
 - 10.14.9 ECOFREEZE INTERNATIONAL
 - 10.14.10 INTERGAS
 - 10.14.11 MK CHEMICAL

*Details on Business Overview, Products Offered, Recent Developments, SWOT Analysis, MnM View might not be captured in case of unlisted companies.

11 APPENDIX

- 11.1 DISCUSSION GUIDE
- 11.2 KNOWLEDGE STORE: MARKETSandMARKETS' SUBSCRIPTION PORTAL
- 11.3 AVAILABLE CUSTOMIZATIONS
- 11.4 RELATED REPORTS
- 11.5 AUTHOR DETAILS

List Of Tables

LIST OF TABLES

Table 1 GWP AND ODP OF MAJOR REFRIGERANTS

Table 2 PROPERTIES OF DIFFERENT REFRIGERANTS

Table 3 ANNUAL GDP GROWTH OF MAJOR ECONOMIES FROM 2012 TO 2016

Table 4 LOW GWP REFRIGERANTS MARKET SIZE, BY TYPE, 2016–2023 (USD MILLION)

Table 5 LOW GWP REFRIGERANTS MARKET SIZE, BY TYPE, 2016–2023 (KILOTONS)

Table 6 LEADING COMPANIES MANUFACTURING AMMONIA REFRIGERANTS

Table 7 LEADING COMPANIES PRODUCING CO₂ REFRIGERANTS

Table 8 INORGANICS MARKET SIZE, BY REGION, 2016–2023 (USD MILLION)

Table 9 INORGANICS MARKET SIZE, BY REGION, 2016–2023 (KILOTONS)

Table 10 APPLICATIONS AND GWP OF HYDROFLUOROOLEFINS

Table 11 FLUOROCARBONS REFRIGERANTS MARKET SIZE, BY REGION, 2016–2023 (USD MILLION)

Table 12 FLUOROCARBONS REFRIGERANTS MARKET SIZE, BY REGION, 2016–2023 (KILOTONS)

Table 13 LEADING COMPANIES PRODUCING HYDROCARBON REFRIGERANTS

Table 14 HYDROCARBONS MARKET SIZE, BY REGION, 2016–2023 (USD MILLION)

Table 15 HYDROCARBONS MARKET SIZE, BY REGION, 2016–2023 (KILOTONS)

Table 16 LOW GWP REFRIGERANTS MARKET SIZE, BY APPLICATION, 2016–2023 (KILOTONS)

Table 17 CRITERIA FOR INDUSTRIAL REFRIGERATION

Table 18 LOW GWP REFRIGERANTS MARKET SIZE IN INDUSTRIAL REFRIGERATION, BY REGION, 2016–2023 (KILOTONS)

Table 19 LOW GWP REFRIGERANTS MARKET SIZE IN COMMERCIAL REFRIGERATION, BY REGION, 2016–2023 (KILOTONS)

Table 20 LOW GWP REFRIGERANTS IN DOMESTIC REFRIGERATION MARKET SIZE, BY REGION, 2016–2023 (KILOTONS)

Table 21 TYPES OF REFRIGERANTS USED IN AIR CONDITIONERS

Table 22 LOW GWP REFRIGERANTS MARKET SIZE IN STATIONARY AIR CONDITIONING, BY REGION, 2016–2023 (KILOTONS)

Table 23 LOW GWP REFRIGERANTS MARKET SIZE IN MOBILE AIR CONDITIONING, BY REGION, 2016–2023 (KILOTONS)

Table 24 ALTERNATE REFRIGERANTS: ADVANTAGES AND CHALLENGES

Table 25 LOW GWP REFRIGERANTS MARKET SIZE IN OTHER APPLICATIONS, BY

REGION, 2016–2023 (KILOTONS)

Table 26 LOW GWP REFRIGERANTS MARKET, BY REGION, 2016–2023 (USD MILLION)

Table 27 LOW GWP REFRIGERANTS MARKET, BY REGION, 2016–2023 (KILOTONS)

Table 28 EUROPE: LOW GWP REFRIGERANTS MARKET SIZE, BY COUNTRY, 2016–2023 (USD MILLION)

Table 29 EUROPE: LOW GWP REFRIGERANTS MARKET SIZE, BY COUNTRY, 2016–2023 (KILOTONS)

Table 30 EUROPE: LOW GWP REFRIGERANTS MARKET SIZE, BY TYPE, 2016–2023 (USD MILLION)

Table 31 EUROPE: LOW GWP REFRIGERANTS MARKET SIZE, BY TYPE, 2016–2023 (KILOTONS)

Table 32 EUROPE: LOW GWP REFRIGERANTS MARKET SIZE, BY APPLICATION, 2016–2023 (KILOTONS)

Table 33 GERMANY: LOW GWP REFRIGERANTS MARKET SIZE, BY TYPE, 2016–2023 (USD MILLION)

Table 34 GERMANY: LOW GWP REFRIGERANTS MARKET SIZE, BY TYPE, 2016–2023 (KILOTONS)

Table 35 GERMANY: LOW GWP REFRIGERANTS MARKET SIZE, BY APPLICATION, 2016–2023 (KILOTONS)

Table 36 UK: LOW GWP REFRIGERANTS MARKET SIZE, BY TYPE, 2016–2023 (USD MILLION)

Table 37 UK: LOW GWP REFRIGERANTS MARKET SIZE, BY TYPE, 2016–2023 (KILOTONS)

Table 38 UK: LOW GWP REFRIGERANTS MARKET SIZE, BY APPLICATION, 2016–2023 (KILOTONS)

Table 39 FRANCE: LOW GWP REFRIGERANTS MARKET SIZE, BY TYPE, 2016–2023 (USD MILLION)

Table 40 FRANCE: LOW GWP REFRIGERANTS MARKET SIZE, BY TYPE, 2016–2023 (KILOTONS)

Table 41 FRANCE: LOW GWP REFRIGERANTS MARKET SIZE, BY APPLICATION, 2016–2023 (KILOTONS)

Table 42 ITALY LOW GWP REFRIGERANTS MARKET, BY TYPE, 2016–2023 (USD MILLION)

Table 43 ITALY LOW GWP REFRIGERANTS MARKET, BY TYPE, 2016–2023 (KILOTONS)

Table 44 ITALY: LOW GWP REFRIGERANTS MARKET SIZE, BY APPLICATION, 2016–2023 (KILOTONS)

Table 45 SPAIN LOW GWP REFRIGERANTS MARKET, BY TYPE, 2016–2023 (USD MILLION)

Table 46 SPAIN LOW GWP REFRIGERANTS MARKET, BY TYPE, 2016–2023 (KILOTONS)

Table 47 SPAIN: LOW GWP REFRIGERANTS MARKET SIZE, BY APPLICATION, 2016–2023 (KILOTONS)

Table 48 REST OF EUROPE LOW GWP REFRIGERANTS MARKET, BY TYPE, 2016–2023 (USD MILLION)

Table 49 REST OF EUROPE LOW GWP REFRIGERANTS MARKET, BY TYPE, 2016–2023 (KILOTONS)

Table 50 REST OF EUROPE: LOW GWP REFRIGERANTS MARKET SIZE, BY APPLICATION, 2016–2023 (KILOTONS)

Table 51 FACTORS DRIVING THE ASIA PACIFIC LOW GWP REFRIGERANTS MARKET

Table 52 ASIA PACIFIC: LOW GWP REFRIGERANTS MARKET SIZE, BY COUNTRY, 2016–2023 (USD MILLION)

Table 53 ASIA PACIFIC: LOW GWP REFRIGERANTS MARKET SIZE, BY COUNTRY, 2016–2023 (KILOTONS)

Table 54 ASIA PACIFIC: LOW GWP REFRIGERANTS MARKET SIZE, BY TYPE, 2016–2023 (USD MILLION)

Table 55 ASIA PACIFIC: LOW GWP REFRIGERANTS MARKET SIZE, BY TYPE, 2016–2023 (KILOTONS)

Table 56 ASIA PACIFIC: LOW GWP REFRIGERANTS MARKET SIZE, BY APPLICATION, 2016–2023 (KILOTONS)

Table 57 CHINA: LOW GWP REFRIGERANTS MARKET SIZE, BY TYPE, 2016–2023 (USD MILLION)

Table 58 CHINA: LOW GWP REFRIGERANTS MARKET SIZE, BY TYPE, 2016–2023 (KILOTONS)

Table 59 CHINA: LOW GWP REFRIGERANTS MARKET SIZE, BY APPLICATION, 2016–2023 (KILOTONS)

Table 60 JAPAN: LOW GWP REFRIGERANTS MARKET SIZE, BY TYPE, 2016–2023 (USD MILLION)

Table 61 JAPAN: LOW GWP REFRIGERANTS MARKET SIZE, BY TYPE, 2016–2023 (KILOTONS)

Table 62 JAPAN: LOW GWP REFRIGERANTS MARKET SIZE, BY APPLICATION, 2016–2023 (KILOTONS)

Table 63 INDIA: LOW GWP REFRIGERANTS MARKET SIZE, BY TYPE, 2016–2023 (USD MILLION)

Table 64 INDIA: LOW GWP REFRIGERANTS MARKET SIZE, BY TYPE, 2016–2023

(KILOTONS)

Table 65 INDIA: LOW GWP REFRIGERANTS MARKET SIZE, BY APPLICATION, 2016–2023 (KILOTONS)

Table 66 SOUTH KOREA: LOW GWP REFRIGERANTS MARKET SIZE, BY TYPE, 2016–2023 (USD MILLION)

Table 67 SOUTH KOREA: LOW GWP REFRIGERANTS MARKET SIZE, BY TYPE, 2016–2023 (KILOTONS)

Table 68 SOUTH KOREA: LOW GWP REFRIGERANTS MARKET SIZE, BY APPLICATION, 2016–2023 (KILOTONS)

Table 69 INDONESIA: LOW GWP REFRIGERANTS MARKET SIZE, BY TYPE, 2016–2023 (USD MILLION)

Table 70 INDONESIA: LOW GWP REFRIGERANTS MARKET SIZE, BY TYPE, 2016–2023 (KILOTONS)

Table 71 INDONESIA: LOW GWP REFRIGERANTS MARKET SIZE, BY APPLICATION, 2016–2023 (KILOTONS)

Table 72 THAILAND: LOW GWP REFRIGERANTS MARKET SIZE, BY TYPE, 2016–2023 (USD MILLION)

Table 73 THAILAND: LOW GWP REFRIGERANTS MARKET SIZE, BY TYPE, 2016–2023 (KILOTONS)

Table 74 THAILAND: LOW GWP REFRIGERANTS MARKET SIZE, BY APPLICATION, 2016–2023 (KILOTONS)

Table 75 SINGAPORE LOW GWP REFRIGERANTS MARKET, BY TYPE, 2016–2023 (USD MILLION)

Table 76 SINGAPORE LOW GWP REFRIGERANTS MARKET, BY TYPE, 2016–2023 (KILOTONS)

Table 77 SINGAPORE: LOW GWP REFRIGERANTS MARKET SIZE, BY APPLICATION, 2016–2023 (KILOTONS)

Table 78 MALAYSIA LOW GWP REFRIGERANTS MARKET, BY TYPE, 2016–2023 (USD MILLION)

Table 79 MALAYSIA LOW GWP REFRIGERANTS MARKET, BY TYPE, 2016–2023 (KILOTONS)

Table 80 MALAYSIA: LOW GWP REFRIGERANTS MARKET SIZE, BY APPLICATION, 2016–2023 (KILOTONS)

Table 81 REST OF ASIA PACIFIC LOW GWP REFRIGERANTS MARKET, BY TYPE, 2016–2023 (USD MILLION)

Table 82 REST OF ASIA PACIFIC LOW GWP REFRIGERANTS MARKET, BY TYPE, 2016–2023 (KILOTONS)

Table 83 REST OF ASIA PACIFIC: LOW GWP REFRIGERANTS MARKET SIZE, BY APPLICATION, 2016–2023 (KILOTONS)

Table 84 NORTH AMERICA: LOW GWP REFRIGERANTS MARKET SIZE, BY COUNTRY, 2016–2023 (USD MILLION)

Table 85 NORTH AMERICA: LOW GWP REFRIGERANTS MARKET SIZE, BY COUNTRY, 2016–2023 (KILOTONS)

Table 86 NORTH AMERICA: LOW GWP REFRIGERANTS MARKET SIZE, BY TYPE, 2016–2023 (USD MILLION)

Table 87 NORTH AMERICA: LOW GWP REFRIGERANTS MARKET SIZE, BY TYPE, 2016–2023 (KILOTONS)

Table 88 NORTH AMERICA: LOW GWP REFRIGERANTS MARKET SIZE, BY APPLICATION, 2016–2023 (KILOTONS)

Table 89 US: LOW GWP REFRIGERANTS MARKET SIZE, BY TYPE, 2016–2023 (USD MILLION)

Table 90 US: LOW GWP REFRIGERANTS MARKET SIZE, BY TYPE, 2016–2023 (KILOTONS)

Table 91 US: LOW GWP REFRIGERANTS MARKET SIZE, BY APPLICATION, 2016–2023 (KILOTONS)

Table 92 CANADA: LOW GWP REFRIGERANTS MARKET SIZE, BY TYPE, 2016–2023 (USD MILLION)

Table 93 CANADA: LOW GWP REFRIGERANTS MARKET SIZE, BY TYPE, 2016–2023 (KILOTONS)

Table 94 CANADA: LOW GWP REFRIGERANTS MARKET SIZE, BY APPLICATION, 2016–2023 (KILOTONS)

Table 95 MEXICO: LOW GWP REFRIGERANTS MARKET SIZE, BY TYPE, 2016–2023 (USD MILLION)

Table 96 MEXICO: LOW GWP REFRIGERANTS MARKET SIZE, BY TYPE, 2016–2023 (KILOTONS)

Table 97 MEXICO: LOW GWP REFRIGERANTS MARKET SIZE, BY APPLICATION, 2016–2023 (KILOTONS)

Table 98 MIDDLE EAST & AFRICA: LOW GWP REFRIGERANTS MARKET SIZE, BY COUNTRY, 2016–2023 (USD MILLION)

Table 99 MIDDLE EAST & AFRICA: LOW GWP REFRIGERANTS MARKET SIZE, BY COUNTRY, 2016–2023 (KILOTONS)

Table 100 MIDDLE EAST & AFRICA: LOW GWP REFRIGERANTS MARKET SIZE, BY TYPE, 2016–2023 (USD MILLION)

Table 101 MIDDLE EAST & AFRICA: LOW GWP REFRIGERANTS MARKET SIZE, BY TYPE, 2016–2023 (KILOTONS)

Table 102 MIDDLE EAST & AFRICA: LOW GWP REFRIGERANTS MARKET SIZE, BY APPLICATION, 2016–2023 (KILOTONS)

Table 103 SOUTH AFRICA LOW GWP REFRIGERANTS MARKET, BY TYPE,

2016–2023 (USD MILLION)

Table 104 SOUTH AFRICA LOW GWP REFRIGERANTS MARKET, BY TYPE, 2016–2023 (KILOTONS)

Table 105 SOUTH AFRICA: LOW GWP REFRIGERANTS MARKET SIZE, BY APPLICATION, 2016–2023 (KILOTONS)

Table 106 SAUDI ARABIA LOW GWP REFRIGERANTS MARKET, BY TYPE, 2016–2023 (USD MILLION)

Table 107 SAUDI ARABIA LOW GWP REFRIGERANTS MARKET, BY TYPE, 2016–2023 (KILOTONS)

Table 108 SAUDI ARABIA: LOW GWP REFRIGERANTS MARKET SIZE, BY APPLICATION, 2016–2023 (KILOTONS)

Table 109 TURKEY LOW GWP REFRIGERANTS MARKET, BY TYPE, 2016–2023 (USD MILLION)

Table 110 TURKEY LOW GWP REFRIGERANTS MARKET, BY TYPE, 2016–2023 (KILOTONS)

Table 111 TURKEY: LOW GWP REFRIGERANTS MARKET SIZE, BY APPLICATION, 2016–2023 (KILOTONS)

Table 112 REST OF MIDDLE EAST & AFRICA LOW GWP REFRIGERANTS MARKET, BY TYPE, 2016–2023 (USD MILLION)

Table 113 REST OF MIDDLE EAST & AFRICA LOW GWP REFRIGERANTS MARKET, BY TYPE, 2016–2023 (KILOTONS)

Table 114 REST OF MIDDLE EAST & AFRICA: LOW GWP REFRIGERANTS MARKET SIZE, BY APPLICATION, 2016–2023 (KILOTONS)

Table 115 SOUTH AMERICA: LOW GWP REFRIGERANTS MARKET SIZE, BY COUNTRY, 2016–2023 (USD MILLION)

Table 116 SOUTH AMERICA: LOW GWP REFRIGERANTS MARKET SIZE, BY COUNTRY, 2016–2023 (KILOTONS)

Table 117 SOUTH AMERICA: LOW GWP REFRIGERANTS MARKET SIZE, BY TYPE, 2016–2023 (USD MILLION)

Table 118 SOUTH AMERICA: LOW GWP REFRIGERANTS MARKET SIZE, BY TYPE, 2016–2023 (KILOTONS)

Table 119 SOUTH AMERICA: LOW GWP REFRIGERANTS MARKET SIZE, BY APPLICATION, 2016–2023 (KILOTONS)

Table 120 BRAZIL LOW GWP REFRIGERANTS MARKET, BY TYPE, 2016–2023 (USD MILLION)

Table 121 BRAZIL LOW GWP REFRIGERANTS MARKET, BY TYPE, 2016–2023 (KILOTONS)

Table 122 BRAZIL: LOW GWP REFRIGERANTS MARKET SIZE, BY APPLICATION, 2016–2023 (KILOTONS)

Table 123 ARGENTINA LOW GWP REFRIGERANTS MARKET, BY TYPE, 2016–2023 (USD MILLION)

Table 124 ARGENTINA LOW GWP REFRIGERANTS MARKET, BY TYPE, 2016–2023 (KILOTONS)

Table 125 ARGENTINA: LOW GWP REFRIGERANTS MARKET SIZE, BY APPLICATION, 2016–2023 (KILOTONS)

Table 126 CHILE LOW GWP REFRIGERANTS MARKET, BY TYPE, 2016–2023 (USD MILLION)

Table 127 CHILE LOW GWP REFRIGERANTS MARKET, BY TYPE, 2016–2023 (KILOTONS)

Table 128 CHILE: LOW GWP REFRIGERANTS MARKET SIZE, BY APPLICATION, 2016–2023 (KILOTONS)

Table 129 REST OF SOUTH AMERICA LOW GWP REFRIGERANTS MARKET, BY TYPE, 2016–2023 (USD MILLION)

Table 130 REST OF SOUTH AMERICA LOW GWP REFRIGERANTS MARKET, BY TYPE, 2016–2023 (KILOTONS)

Table 131 REST OF SOUTH AMERICA: LOW GWP REFRIGERANTS MARKET SIZE, BY APPLICATION, 2016–2023 (KILOTONS)

Table 132 NEW PRODUCT LAUNCHES & DEVELOPMENTS, 2012–2018

Table 133 PARTNERSHIPS & CONTRACTS, 2012–2018

Table 134 EXPANSIONS, 2012–2018

Table 135 ACQUISITIONS & MERGERS, 2012–2018

List Of Figures

LIST OF FIGURES

Figure 1 LOW GWP REFRIGERANTS MARKET SEGMENTATION

Figure 2 LOW GWP REFRIGERANTS MARKET: RESEARCH DESIGN

Figure 3 BREAKDOWN OF PRIMARY INTERVIEWS

Figure 4 BOTTOM-UP APPROACH

Figure 5 TOP-DOWN APPROACH

Figure 6 LOW GWP REFRIGERANTS MARKET: DATA TRIANGULATION

Figure 7 LOW GWP REFRIGERANTS MARKET SNAPSHOT: BY TYPE

Figure 8 COMMERCIAL REFRIGERATION APPLICATION SEGMENT TO WITNESS THE HIGHEST GROWTH

Figure 9 LOW GWP REFRIGERANTS MARKET SHARE, BY REGION

Figure 10 GROWTH OF INDUSTRIAL REFRIGERATION EXPECTED TO DRIVE LOW GWP REFRIGERANTS MARKET BETWEEN 2018 AND 2023

Figure 11 LOW GWP REFRIGERANTS MARKET IN SOUTH AMERICA PROJECTED TO GROW AT HIGHEST CAGR DURING FORECAST PERIOD

Figure 12 INDUSTRIAL REFRIGERATION APPLICATION SEGMENT ESTIMATED TO ACCOUNT FOR LARGEST SHARE OF ASIA PACIFIC LOW GWP REFRIGERANTS MARKET IN 2018

Figure 13 INORGANICS SEGMENT ESTIMATED TO ACCOUNT FOR LARGEST SHARE OF LOW GWP REFRIGERANTS MARKET ACROSS ALL REGIONS IN 2018

Figure 14 US PROJECTED TO LEAD LOW GWP REFRIGERANTS MARKET BETWEEN 2018 AND 2023

Figure 15 DRIVERS, RESTRAINTS, OPPORTUNITIES, AND CHALLENGES: LOW GWP REFRIGERANTS MARKET

Figure 16 PORTER'S FIVE FORCES ANALYSIS: LOW GWP REFRIGERANTS MARKET,

Figure 17 CONSTRUCTION INDUSTRY GROWTH RATE, 2014

Figure 18 MANUFACTURING INDUSTRY GROWTH RATE, 2014

Figure 19 LOW GWP REFRIGERANT MARKET, BY TYPE (2018 & 2023)

Figure 20 LOW GWP REFRIGERANTS, BY APPLICATION (2018)

Figure 21 REGIONAL SNAPSHOT

Figure 22 EUROPE: LOW GWP REFRIGERANTS MARKET SNAPSHOT, 2018

Figure 23 ASIA PACIFIC: LOW GWP REFRIGERANTS MARKET SNAPSHOT

Figure 24 NORTH AMERICA: LOW GWP REFRIGERANTS MARKET SNAPSHOT, 2018

Figure 25 MIDDLE EAST & AFRICA: LOW GWP REFRIGERANTS MARKET

SNAPSHOT, 2018

Figure 26 SOUTH AMERICA: LOW GWP REFRIGERANTS MARKET SNAPSHOT, 2018

Figure 27 COMPANIES IN LOW GWP REFRIGERANTS MARKET HAVE ADOPTED ORGANIC GROWTH STRATEGIES BETWEEN 2012 AND 2018

Figure 28 LOW GWP REFRIGERANTS MARKET: COMPETITIVE LEADERSHIP MAPPING, 2018

Figure 29 LOW GWP REFRIGERANTS MARKET RANKING, BY COMPANY, 2018

Figure 30 THE LINDE GROUP: COMPANY SNAPSHOT

Figure 31 SWOT ANALYSIS: LINDE GROUP

Figure 32 SINOCHEM GROUP: COMPANY SNAPSHOT

Figure 33 SWOT ANALYSIS: SINOCHEM GROUP

Figure 34 SWOT ANALYSIS: AIRGAS

Figure 35 HONEYWELL: COMPANY SNAPSHOTS

Figure 36 SWOT ANALYSIS: HONEYWELL

Figure 37 SWOT ANALYSIS: ENGAS AUSTRALASIA

I would like to order

Product name: Low GWP Refrigerants Market by Type (Inorganics, Hydrocarbons, Fluorocarbons), Application (Commercial Refrigeration, Industrial Refrigeration, Domestic Refrigeration), and Region (Asia Pacific, Europe, North America) - Global Forecast to 2023

Product link: <https://marketpublishers.com/r/LA2B39659F3EN.html>

Price: US\$ 5,650.00 (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/LA2B39659F3EN.html>