

# ***Global Liquid Runway Deicer Market Research Report, Outlook and Forecast 2024-2030***

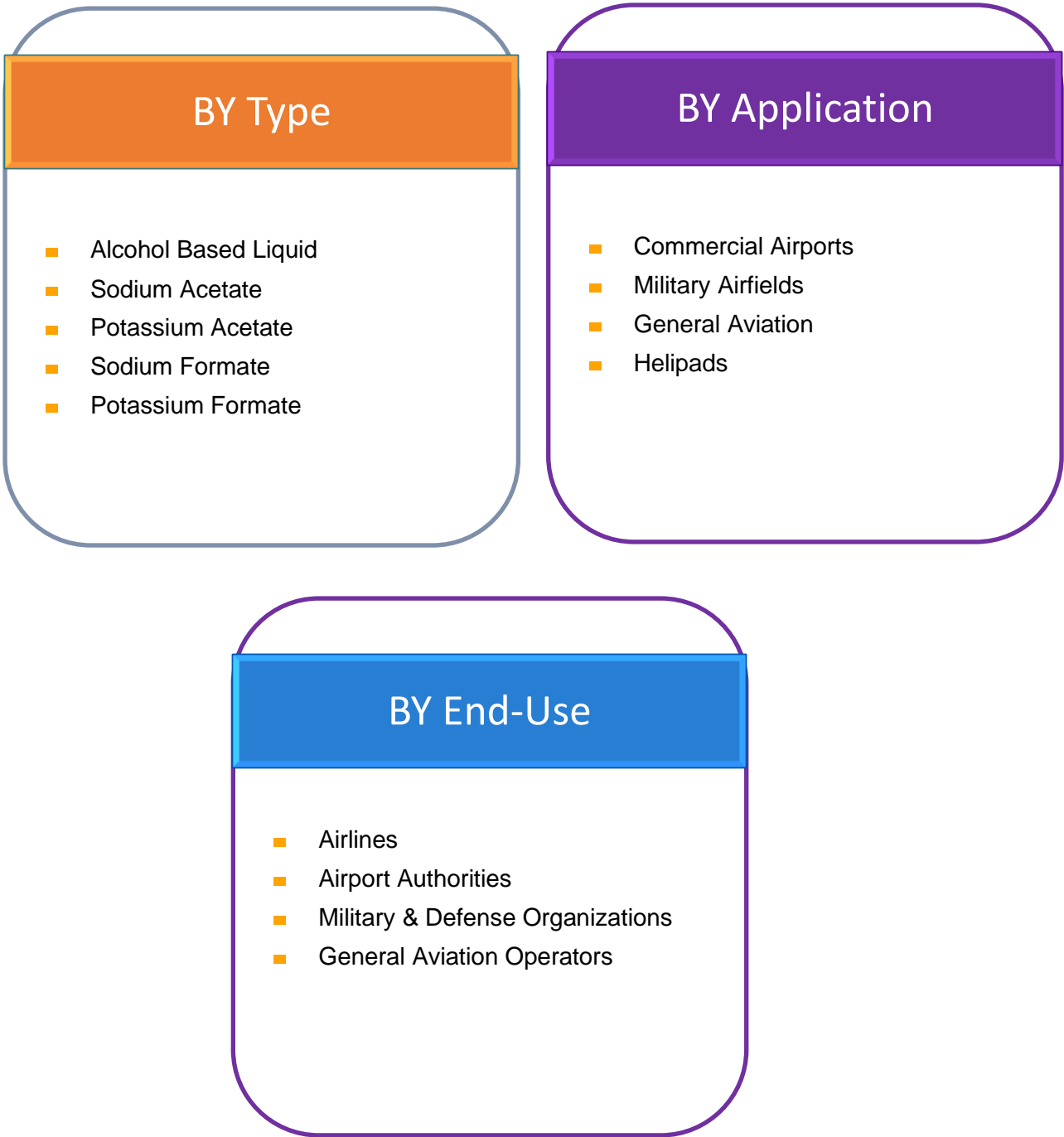
<b>Contact us at</b>	Ishan@24chemicalResearch.com
	Query@24chemicalresearch.com
<b>Give us a call</b>	<b>+1(332) 2424 294   +91 9169162030</b>



Single User License	Multi User License	Enterprise License	Pages	Tables and Figures	Published Date
USD	USD	USD	200+	178	2024

+91 9169162030 (Asia) + 1 332 2424 294 (Int'l) [Ishan@24chemicalresearch.com](mailto:Ishan@24chemicalresearch.com)

SUMMARY

Total Market by Segment:



<div></div> <div>Production by Region (Supply)</div>	<div></div> <div>Consumption by Region (Demand)</div>
<div><ul style="list-style-type: none"><li>North America</li><li>Europe</li><li>Asia-Pacific</li><li>South America</li><li>Middle East &amp; Africa</li></ul></div>	<div><div><div>➤ Europe</div><div><ul style="list-style-type: none"><li>Germany</li><li>France</li><li>U.K.</li><li>Italy</li><li>Russia</li><li>Nordic Countries</li><li>Rest of Europe</li></ul></div></div><div><div>➤ North America</div><div><ul style="list-style-type: none"><li>United States</li><li>Canada</li></ul></div></div><div><div>➤ Asia-Pacific</div><div><ul style="list-style-type: none"><li>China</li><li>Japan</li><li>South Korea</li><li>India</li><li>Vietnam</li><li>Southeast Asia</li><li>Australia</li><li>Rest of Asia-Pacific</li></ul></div></div><div><div>➤ South America</div><div><ul style="list-style-type: none"><li>Mexico</li><li>Brazil</li><li>Rest of South America</li></ul></div></div><div><div>➤ Middle East &amp; Africa</div><div><ul style="list-style-type: none"><li>Turkey</li><li>Saudi Arabia</li><li>UAE</li><li>Rest of MEA</li></ul></div></div></div>

Competitor Analysis

The report also provides analysis of leading market participants including:

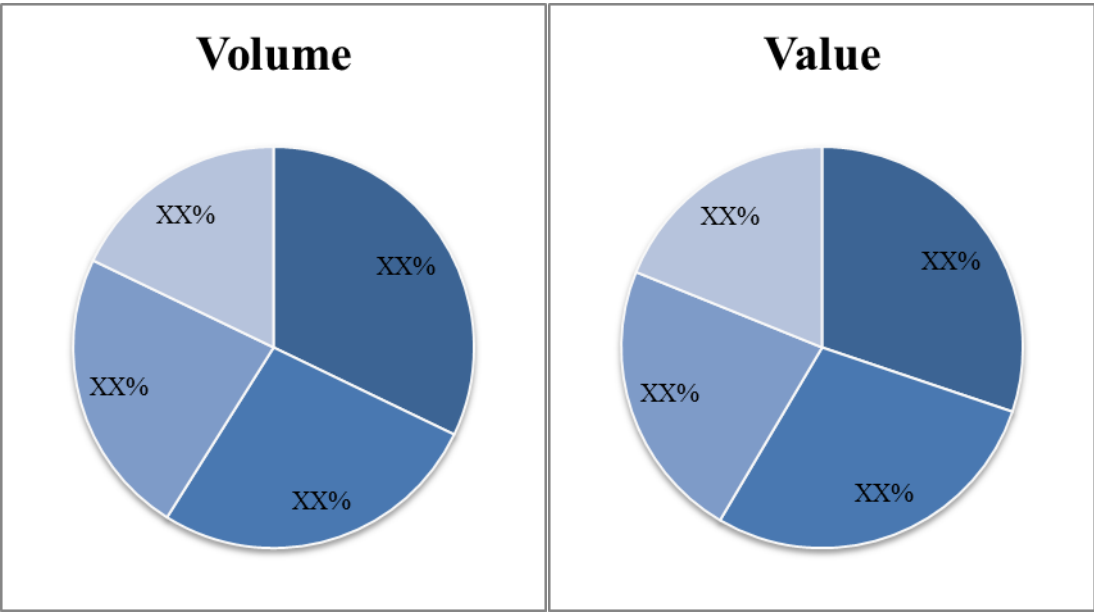
Liquid Runway Deicer market was valued at USD 107 million in 2023 and is projected to reach USD 147 million by 2030, growing at a Compound Annual Growth Rate (CAGR) of 5.1% during the forecast period (2024-2030).

Key companies LIQUID RUNWAY DEICER revenues in global market, 2019-2024 (estimated), (\$ millions)

Key companies LIQUID RUNWAY DEICER revenues share in global market, 2023 (%)

Key companies LIQUID RUNWAY DEICER sales in global market, 2019-2024 (estimated), (Tons)

Key companies LIQUID RUNWAY DEICER sales share in global market, 2023 (%)



Market Players & Competitors: The report covers following key players of the industry who have Global and Regional presence in the market and are the major market share takers.

Further, the report presents profiles of competitors in the market, key players include:

Players	Operational Status (Active/Inactive)	Meger or Acquisition	New or Emerging Players
■ Cryotech			
■ Proviron			
■ Perstorp			
■ Clariant			
■ LNT Group			
■ TR Bonnyman Son & Company			
■ Kilfrost			
■ Harmony Deicing			
■ Esseco			
■ Seneca			
■ OMEX			
■ Pelican Chemicals			
■ UltraBlue			
■ Boschung			

■ Bare Ground			
■ Eastman			

**The final report will summarize the current status of existing players, including mergers and acquisitions, and introduce emerging market entrants gaining market share.**

### Key Indicators Analysed

- **Market Players & Competitor Analysis:** The report covers the key players of the industry including Company Profile, Product Specifications, Production Capacity/Sales, Revenue, Price and Gross Margin 2017-2028 & Sales with a thorough analysis of the market's competitive landscape and detailed information on vendors and comprehensive details of factors that will challenge the growth of major market vendors.
- **Global and Regional Market Analysis:** The report includes Global & Regional market status and outlook 2017-2028. Further the report provides break down details about each region & countries covered in the report. Identifying its sales, sales volume & revenue forecast. With detailed analysis by types and applications.
- **Market Trends:** Market key trends which include Increased Competition and Continuous Innovations.
- **OpportMTies and Drivers:** Identifying the Growing Demands and New Technology
- **Porters Five Force Analysis:** The report provides with the state of competition in industry depending on five basic forces: threat of new entrants, bargaining power of suppliers, bargaining power of buyers, threat of substitute products or services, and existing industry rivalry.

### Key Reasons to Purchase

- To gain insightful analyses of the market and have comprehensive understanding of the global market and its commercial landscape.
- Assess the production processes, major issues, and solutions to mitigate the development risk.
- To understand the most affecting driving and restraining forces in the market and its impact in the global market.
- Learn about the market strategies that are being adopted by leading respective organizations.
- To understand the future outlook and prospects for the market.
- Besides the standard structure reports, we also provide custom research according to specific requirements.

### Global Liquid Runway Deicer Market: Segment Analysis

The research report includes specific segments by region (country), by manufacturers, by Type and by Application. Each type provides information about the production during the forecast period of 2019 to 2030. by Application segment also provides consumption during the forecast period of 2019 to 2030. Understanding the segments helps in identifying the importance of different factors that aid the market growth.

## TABLE OF CONTENTS

<b>1 Liquid Runway Deicer Market Overview</b>	<b>1</b>
<b>1.1 Product Overview and Scope of Liquid Runway Deicer</b>	<b>1</b>
<b>1.2 Liquid Runway Deicer Segment by Type</b>	<b>3</b>
1.2.1 Global Liquid Runway Deicer Market Size YoY Growth Rate Analysis by Type: 2023 VS 2030	3
1.2.2 Alcohol Based Liquid	4
1.2.3 Sodium Acetate	4
1.2.4 Potassium Acetate	4
1.2.5 Sodium Formate	4
1.2.6 Potassium Formate	4
<b>1.3 Liquid Runway Deicer Segment by Application</b>	<b>5</b>
1.3.1 Global Liquid Runway Deicer Market Size YoY Growth Rate Analysis by Application: 2023 VS 2030	5
1.3.2 Commercial Airports	6
1.3.3 Military Airfields	6
1.3.4 General Aviation	6
1.3.5 Helipads	7
<b>1.4 Global Market Growth Prospects</b>	<b>7</b>
1.4.1 Global Liquid Runway Deicer Revenue Estimates and Forecasts (2019-2030)	7
1.4.2 Global Liquid Runway Deicer Production Estimates and Forecasts (2019-2030)	8
<b>1.5 Global Market Size by Region</b>	<b>9</b>
1.5.1 Global Liquid Runway Deicer Market Size Estimates and Forecasts by Region: 2019 VS 2023 VS 2030	9
1.5.2 North America Liquid Runway Deicer Estimates and Forecasts (2019-2030)	10
1.5.3 Europe Liquid Runway Deicer Estimates and Forecasts (2019-2030)	11
1.5.4 Asia-Pacific Liquid Runway Deicer Estimates and Forecasts (2019-2030)	11
1.5.5 South America Liquid Runway Deicer Estimates and Forecasts (2019-2030)	12
1.5.6 Middle East & Africa Liquid Runway Deicer Estimates and Forecasts (2019-2030)	13
<b>2 Global Growth Trends</b>	<b>14</b>
<b>2.1 Industry Trends</b>	<b>14</b>
2.1.1 SWOT Analysis	14
2.1.2 PESTEL Analysis	15
2.1.3 Porter's Five Forces Analysis	18
<b>2.2 Potential Market and Growth Potential Analysis</b>	<b>19</b>
<b>3 Market Competition by Manufacturers</b>	<b>20</b>
<b>3.1 Global Liquid Runway Deicer Production by Manufacturers (2019-2023)</b>	<b>20</b>
<b>3.2 Global Liquid Runway Deicer Revenue Market Share by Manufacturers (2019-2023)</b>	<b>21</b>

<b>3.3 Liquid Runway Deicer Market Share by Company Type (Tier 1, Tier 2, and Tier 3)</b>	<b>23</b>
<b>3.4 Global Liquid Runway Deicer Average Price by Manufacturers (2019-2023)</b>	<b>24</b>
<b>3.5 Manufacturers Liquid Runway Deicer Production Sites, Area Served, Product Type</b>	<b>25</b>
<b>3.6 Liquid Runway Deicer Market Competitive Situation and Trends</b>	<b>26</b>
3.6.1 Liquid Runway Deicer Market Concentration Rate	26
3.6.2 Global 5 and 10 Largest Liquid Runway Deicer Players Market Share by Revenue	27
3.6.3 Mergers & Acquisitions, Expansion	27
<b>4 Production by Region</b>	<b>28</b>
<b>4.1 Global Production of Liquid Runway Deicer by Region (2019-2024)</b>	<b>28</b>
<b>4.2 Global Liquid Runway Deicer Revenue Market Share by Region (2019-2024)</b>	<b>29</b>
<b>4.3 Global Liquid Runway Deicer Production, Revenue, Price and Gross Margin (2019-2024)</b>	<b>29</b>
<b>4.4 North America Liquid Runway Deicer Production</b>	<b>30</b>
4.4.1 North America Liquid Runway Deicer Production YoY Growth Rate (2019-2023)	30
4.4.2 North America Liquid Runway Deicer Production, Revenue, Price and Gross Margin (2019-2024)	30
<b>4.5 Europe Liquid Runway Deicer Production</b>	<b>30</b>
4.5.1 Europe Liquid Runway Deicer Production YoY Growth Rate (2019-2024)	30
4.5.2 Europe Liquid Runway Deicer Production, Revenue, Price and Gross Margin (2019-2024)	31
<b>4.6 Asia-Pacific Liquid Runway Deicer Production (2019-2024)</b>	<b>31</b>
4.6.1 Asia-Pacific Liquid Runway Deicer Production YoY Growth Rate (2019-2024)	31
4.6.2 Asia-Pacific Liquid Runway Deicer Production, Revenue, Price and Gross Margin (2019-2024)	31
<b>4.7 South America Liquid Runway Deicer Production (2019-2024)</b>	<b>31</b>
4.7.1 South America Liquid Runway Deicer Production YoY Growth Rate (2019-2024)	31
4.7.2 South America Liquid Runway Deicer Production, Revenue, Price and Gross Margin (2019-2024)	32
<b>4.8 Middle East &amp; Africa Liquid Runway Deicer Production (2019-2024)</b>	<b>32</b>
4.8.1 Middle East & Africa Liquid Runway Deicer Production YoY Growth Rate (2019-2024)	32
4.8.2 Middle East & Africa Liquid Runway Deicer Production, Revenue, Price and Gross Margin (2019-2024)	32
<b>5 Liquid Runway Deicer Consumption by Region</b>	<b>33</b>
<b>5.1 Global Liquid Runway Deicer Consumption by Region</b>	<b>33</b>
5.1.1 Global Liquid Runway Deicer Consumption by Region	33
5.1.2 Global Liquid Runway Deicer Consumption Market Share by Region	33
<b>5.2 North America</b>	<b>34</b>
5.2.1 North America Liquid Runway Deicer Consumption by Country	34
5.2.2 North America LIQUID RUNWAY DEICER Sales, Consumption, Export, Import (2019-2023)	35
5.2.3 U.S.	35
5.2.4 Canada	36



<b>5.3 Europe</b>	<b>36</b>
5.3.1 Europe Liquid Runway Deicer Consumption by Country	37
5.3.2 Europe LIQUID RUNWAY DEICER Sales, Consumption, Export, Import (2019-2023)	37
5.3.3 Germany	38
5.3.4 France	38
5.3.5 U.K.	38
5.3.6 Italy	38
5.3.7 Russia	38
<b>5.4 Asia Pacific</b>	<b>39</b>
5.4.1 Asia Pacific Liquid Runway Deicer Consumption by Region	39
5.4.2 Asia Pacific LIQUID RUNWAY DEICER Sales, Consumption, Export, Import (2019-2023)	39
5.4.3 China	40
5.4.4 Japan	40
5.4.5 South Korea	40
5.4.6 Taiwan	40
5.4.7 Southeast Asia	41
5.4.8 India	41
5.4.9 Vietnam	41
5.4.10 Australia	41
<b>5.5 South America</b>	<b>41</b>
5.5.1 South America Liquid Runway Deicer Consumption by Country	41
5.5.2 Mexico	42
5.5.3 Brazil	42
<b>5.6 Middle East &amp; Africa</b>	<b>42</b>
5.6.1 Middle East & Africa Liquid Runway Deicer Consumption by Country	42
5.6.2 Turkey	43
5.6.3 Israel	43
5.6.4 Saudi Arabia	43
5.6.5 UAE	43
5.6.6 Rest of Middle East & Africa	43
<b>6 Segment by Type</b>	<b>44</b>
6.1 Global Liquid Runway Deicer Production Market Share by Type (2019-2024)	44
6.2 Global Liquid Runway Deicer Revenue Market Share by Type (2019-2024)	45
6.3 Global Liquid Runway Deicer Price by Type (2019-2024)	45
<b>7 Segment by Application</b>	<b>46</b>
7.1 Global Liquid Runway Deicer Production Market Share by Application (2019-2024)	46

<b>7.2 Global Liquid Runway Deicer Revenue Market Share by Application (2019-2024)</b>	<b>47</b>
<b>7.3 Global Liquid Runway Deicer Price by Application (2019-2024)</b>	<b>47</b>
<b>8 Segment by End-Use</b>	<b>48</b>
<b>8.1 Global Liquid Runway Deicer Production Market Share by End-Use (2019-2024)</b>	<b>48</b>
<b>8.2 Global Liquid Runway Deicer Revenue Market Share by End-Use (2019-2024)</b>	<b>49</b>
<b>8.3 Global Liquid Runway Deicer Price by End-Use (2019-2024)</b>	<b>49</b>
<b>9 Key Companies Profiled</b>	<b>51</b>
<b>9.1 Cryotech</b>	<b>51</b>
9.1.1 Cryotech Liquid Runway Deicer Corporation Information	51
9.1.2 Cryotech Liquid Runway Deicer Product Portfolio	51
9.1.3 Cryotech Liquid Runway Deicer Production Capacity, Revenue, Price and Gross Margin (2019-2024)	52
9.1.4 Cryotech Main Business and Markets Served	52
9.1.5 Cryotech Recent Developments/Updates	52
<b>9.2 Provion</b>	<b>53</b>
9.2.1 Provion Liquid Runway Deicer Corporation Information	53
9.2.2 Provion Liquid Runway Deicer Product Portfolio	53
9.2.3 Provion Liquid Runway Deicer Production Capacity, Revenue, Price and Gross Margin (2019-2024)	54
9.2.4 Provion Main Business and Markets Served	54
9.2.5 Provion Recent Developments/Updates	54
<b>9.3 Perstorp</b>	<b>55</b>
9.3.1 Perstorp Liquid Runway Deicer Corporation Information	55
9.3.2 Perstorp Liquid Runway Deicer Product Portfolio	55
9.3.3 Perstorp Liquid Runway Deicer Production Capacity, Revenue, Price and Gross Margin (2019-2024)	55
9.3.4 Perstorp Main Business and Markets Served	56
9.3.5 Perstorp Recent Developments/Updates	56
<b>9.4 Clariant</b>	<b>56</b>
9.4.1 Clariant Liquid Runway Deicer Corporation Information	56
9.4.2 Clariant Liquid Runway Deicer Product Portfolio	57
9.4.3 Clariant Liquid Runway Deicer Production Capacity, Revenue, Price and Gross Margin (2019-2024)	57
9.4.4 Clariant Main Business and Markets Served	57
9.4.5 Clariant Recent Developments/Updates	58
<b>9.5 LNT Group</b>	<b>58</b>
9.5.1 LNT Group Liquid Runway Deicer Corporation Information	58
9.5.2 LNT Group Liquid Runway Deicer Product Portfolio	58
9.5.3 LNT Group Liquid Runway Deicer Production Capacity, Revenue, Price and Gross Margin (2019-2024)	59
9.5.4 LNT Group Main Business and Markets Served	59

9.5.5 LNT Group Recent Developments/Updates	59
<b>9.6 TR Bonnyman Son &amp; Company</b>	<b>60</b>
9.6.1 TR Bonnyman Son & Company Liquid Runway Deicer Corporation Information	60
9.6.2 TR Bonnyman Son & Company Liquid Runway Deicer Product Portfolio	60
9.6.3 TR Bonnyman Son & Company Liquid Runway Deicer Production Capacity, Revenue, Price and Gross Margin (2019-2024)	60
9.6.4 TR Bonnyman Son & Company Main Business and Markets Served	61
9.6.5 TR Bonnyman Son & Company Recent Developments/Updates	61
<b>9.7 KILFROST</b>	<b>61</b>
9.7.1 KILFROST Liquid Runway Deicer Corporation Information	61
9.7.2 Kilfrost Liquid Runway Deicer Production Capacity, Revenue, Price and Gross Margin (2019-2024)	62
9.7.3 KILFROST Main Business and Markets Served	62
9.7.4 KILFROST Recent Developments/Updates	62
<b>9.8 Harmony Deicing</b>	<b>63</b>
9.8.1 Harmony Deicing Liquid Runway Deicer Corporation Information	63
9.8.2 Harmony Deicing Liquid Runway Deicer Product Portfolio	63
9.8.3 Harmony Deicing Liquid Runway Deicer Production Capacity, Revenue, Price and Gross Margin (2019-2024)	63
9.8.4 Harmony Deicing Main Business and Markets Served	64
9.8.5 Harmony Deicing Recent Developments/Updates	64
<b>9.9 Esseco</b>	<b>64</b>
9.9.1 Esseco Liquid Runway Deicer Corporation Information	64
9.9.2 Esseco Liquid Runway Deicer Product Portfolio	65
9.9.3 Esseco Liquid Runway Deicer Production Capacity, Revenue, Price and Gross Margin (2019-2024)	65
9.9.4 Esseco Main Business and Markets Served	65
9.9.5 Esseco Recent Developments/Updates	65
<b>9.10 Seneca</b>	<b>66</b>
9.10.1 Seneca Liquid Runway Deicer Corporation Information	66
9.10.2 Seneca Liquid Runway Deicer Product Portfolio	66
9.10.3 Seneca Liquid Runway Deicer Production Capacity, Revenue, Price and Gross Margin (2019-2024)	66
9.10.4 Seneca Main Business and Markets Served	67
9.10.5 Seneca Recent Developments/Updates	67
<b>9.11 OMEX</b>	<b>67</b>
9.11.1 OMEX Liquid Runway Deicer Corporation Information	67
9.11.2 OMEX Liquid Runway Deicer Production Capacity, Revenue, Price and Gross Margin (2019-2024)	68
9.11.3 OMEX Main Business and Markets Served	68
9.11.4 OMEX Recent Developments/Updates	68
<b>9.12 Pelican Chemicals</b>	<b>69</b>

9.12.1 Pelican Chemicals Liquid Runway Deicer Corporation Information	69
9.12.2 Pelican Chemicals Liquid Runway Deicer Product Portfolio	69
9.12.3 Pelican Chemicals Liquid Runway Deicer Production Capacity, Revenue, Price and Gross Margin (2019-2024)	69
9.12.4 Pelican Chemicals Main Business and Markets Served	70
9.12.5 Pelican Chemicals Recent Developments/Updates	70
<b>9.13 UltraBlue</b>	<b>70</b>
9.13.1 UltraBlue Liquid Runway Deicer Corporation Information	70
9.13.2 UltraBlue Liquid Runway Deicer Product Portfolio	71
9.13.3 UltraBlue Liquid Runway Deicer Production Capacity, Revenue, Price and Gross Margin (2019-2024)	71
9.13.4 UltraBlue Main Business and Markets Served	71
9.13.5 UltraBlue Recent Developments/Updates	72
<b>9.14 Boschung</b>	<b>72</b>
9.14.1 Boschung Liquid Runway Deicer Corporation Information	72
9.14.2 Boschung Liquid Runway Deicer Product Portfolio	72
9.14.3 Boschung Liquid Runway Deicer Production Capacity, Revenue, Price and Gross Margin (2019-2024)	73
9.14.4 Boschung Main Business and Markets Served	73
9.14.5 Boschung Recent Developments/Updates	73
<b>10 Liquid Runway Deicer Manufacturing Cost Analysis</b>	<b>74</b>
<b>10.1 Liquid Runway Deicer Key Raw Materials Analysis</b>	<b>74</b>
10.1.1 Key Raw Materials	74
10.1.2 Key Suppliers of Raw Materials	74
<b>10.2 Proportion of Manufacturing Cost Structure</b>	<b>74</b>
<b>10.3 Manufacturing Process Analysis of Liquid Runway Deicer</b>	<b>75</b>
<b>10.4 Liquid Runway Deicer Industrial Chain Analysis</b>	<b>76</b>
<b>11 Marketing Channel, Distributors and Customers</b>	<b>77</b>
<b>11.1 Marketing Channel</b>	<b>77</b>
<b>11.2 Liquid Runway Deicer Distributors List</b>	<b>78</b>
<b>11.3 Liquid Runway Deicer Customers</b>	<b>79</b>
<b>12 Liquid Runway Deicer Market Dynamics</b>	<b>80</b>
<b>12.1 Liquid Runway Deicer Industry Trends</b>	<b>80</b>
<b>12.2 Liquid Runway Deicer Market Drivers</b>	<b>80</b>
<b>12.3 Liquid Runway Deicer Market Challenges</b>	<b>81</b>
<b>12.4 Liquid Runway Deicer Market Restraints</b>	<b>81</b>

<b>13 Production and Supply Forecast</b>	<b>82</b>
13.1 Global Forecasted Production of Liquid Runway Deicer by Region (2024-2030)	82
13.2 North America Liquid Runway Deicer Production, Revenue Forecast (2024-2030)	83
13.3 Europe Liquid Runway Deicer Production, Revenue Forecast (2024-2030)	83
13.4 Asia-Pacific Liquid Runway Deicer Production, Revenue Forecast (2024-2030)	83
13.5 South America Liquid Runway Deicer Production, Revenue Forecast (2024-2030)	84
13.6 Middle East & Africa Liquid Runway Deicer Production, Revenue Forecast (2024-2030)	84
<b>14 Consumption and Demand Forecast</b>	<b>85</b>
14.1 Global Forecasted Demand Analysis of Liquid Runway Deicer	85
14.2 North America Forecasted Consumption of Liquid Runway Deicer by Country	85
14.3 Europe Market Forecasted Consumption of Liquid Runway Deicer by Country	86
14.4 Asia Pacific Market Forecasted Consumption of Liquid Runway Deicer by Region	86
14.5 South America Forecasted Consumption of Liquid Runway Deicer by Country	87
<b>15 Forecast by Type and by Application</b>	<b>88</b>
15.1 Global Production, Revenue and Price Forecast by Type (2024-2030)	88
15.1.1 Global Forecasted Production of Liquid Runway Deicer by Type (2024-2030)	88
15.1.2 Global Forecasted Revenue of Liquid Runway Deicer by Type (2024-2030)	88
15.1.3 Global Forecasted Price of Liquid Runway Deicer by Type (2024-2030)	89
15.2 Global Production, Revenue and Price Forecast by Application (2024-2030)	89
15.2.1 Global Forecasted Production of Liquid Runway Deicer by Application (2024-2030)	89
15.2.2 Global Forecasted Revenue of Liquid Runway Deicer by Application (2024-2030)	89
15.2.3 Global Forecasted Price of Liquid Runway Deicer by Application (2024-2030)	90
15.3 Global Production, Revenue and Price Forecast by End-Use (2024-2030)	90
15.3.1 Global Forecasted Production of Liquid Runway Deicer by End-Use (2024-2030)	90
15.3.2 Global Forecasted Revenue of Liquid Runway Deicer by End-Use (2024-2030)	91
15.3.3 Global Forecasted Price of Liquid Runway Deicer by End-Use (2024-2030)	91
15.4 Global Production, Revenue and Price Forecast by Sub-typ2 (2024-2030)	91
15.4.1 Global Forecasted Production of Liquid Runway Deicer by Sub-typ2 (2024-2030)	91
15.4.2 Global Forecasted Revenue of Liquid Runway Deicer by Sub-typ2 (2024-2030)	92
15.4.3 Global Forecasted Price of Liquid Runway Deicer by Sub-typ2 (2024-2030)	92
<b>16 Research Findings and Conclusion</b>	<b>93</b>
<b>17 Methodology and Data Source</b>	<b>94</b>
17.1 Methodology/Research Approach	94

17.1.1 Research Programs/Design	94
17.1.2 Market Size Estimation	95
17.1.3 Market Breakdown and Data Triangulation	96
<b>17.2 Data Source</b>	<b>97</b>
17.2.1 Secondary Sources	97
17.2.2 Primary Sources	98
<b>17.3 Author List</b>	<b>99</b>
<b>17.4 Disclaimer</b>	<b>99</b>
<b>18 Appendix</b>	<b>100</b>
<b>18.1 Note</b>	<b>100</b>
<b>18.2 Examples of Clients</b>	<b>100</b>

# 1 Liquid Runway Deicer Market Overview

## 1.1 Product Overview and Scope of Liquid Runway Deicer

Liquid runway deicers are specialized chemicals used to remove or prevent the formation of ice and snow on airport runways, taxiways, and other critical areas. These deicers play a crucial role in ensuring safe and efficient airport operations during winter conditions.

### Regional Consumption Insights:

- **North America:** North America is a major consumer of liquid runway deicers due to its severe winter weather conditions. Major airports across the United States and Canada rely heavily on deicers to maintain operational safety and efficiency. The region's regulatory environment also emphasizes the use of environmentally friendly deicing solutions.
- **Europe:** Europe shows significant consumption of liquid runway deicers, particularly in countries with harsh winter climates like Scandinavia, Germany, and the United Kingdom. The region's focus on maintaining high safety standards and minimizing environmental impact drives the demand for advanced deicing solutions.
- **Asia-Pacific:** The Asia-Pacific region is witnessing rapid growth in the consumption of liquid runway deicers, driven by the expanding aviation sector and increasing frequency of flights. Countries like China, Japan, and South Korea are **key consumers**, with airports investing in effective deicing strategies to ensure safety and punctuality.
- **Latin America:** Latin America is an emerging market for liquid runway deicers, with growing demand from airports in regions experiencing occasional cold weather and frost. The rising air traffic and expansion of airport infrastructure in countries like Brazil and Argentina contribute to the increasing consumption.
- **Middle East and Africa:** The Middle East and Africa are gradually increasing their consumption of liquid runway deicers. While cold weather is less common, major airport hubs in these regions are investing in deicing solutions to ensure preparedness for unexpected weather conditions.

### End-Use Applications:

#### Key applications of liquid runway deicers include:

- **Airport Runways:** Used to remove and prevent ice and snow accumulation on runways, ensuring safe takeoff and landing operations.

- **Taxiways and Aprons:** Applied to taxiways and aprons to maintain smooth and safe ground operations for aircraft.
- **Helipads:** Utilized in helipads to ensure the safety of helicopter operations during winter conditions.

## Market Drivers and Challenges

### Market Drivers:

- **Airport Safety and Efficiency:** The critical need to maintain safe and efficient airport operations during winter drives the demand for effective liquid runway deicers.
- **Expansion of Aviation Sector:** The rapid growth of the global aviation sector, particularly in emerging economies, increases the demand for advanced deicing solutions.
- **Technological Advancements:** Continuous innovations in deicing formulations and application technologies enhance the efficiency, environmental safety, and cost-effectiveness of liquid runway deicers.
- **Regulatory Compliance:** Stringent regulations regarding environmental protection and operational safety drive the adoption of eco-friendly and efficient deicing solutions.

### Challenges:

- **Environmental Concerns:** The environmental impact of deicing chemicals, including potential contamination of water sources and soil, poses a challenge. Manufacturers must invest in developing biodegradable and less harmful formulations.
- **High Operational Costs:** The high cost of deicing operations, including the purchase and application of deicing chemicals, can strain airport budgets, particularly for smaller airports.
- **Weather Variability:** The unpredictability of weather conditions and varying winter severity can impact the demand for deicing solutions, creating challenges for inventory management and production planning.
- **Regulatory Compliance:** Ensuring compliance with stringent environmental and safety regulations requires continuous monitoring and investment in R&D.



Figure 1. Product Picture of Liquid Runway Deicer



Source: Secondary Sources and Research, 2024

## 1.2 Liquid Runway Deicer Segment by Type

Segment by Type, the Liquid Runway Deicer can be split into Alcohol Based Liquid, Sodium Acetate, etc.

The table below visually and clearly details the market size of Liquid Runway Deicer, in volume (Tons) and value (US\$ Million), market share and growth trend of each type in 2023 and 2030.

The CAGR (2024-2030) is based on the value of Liquid Runway Deicer for each type and the overall market.

### 1.2.1 Global Liquid Runway Deicer Market Size YoY Growth Rate Analysis by Type: 2023 VS 2030

**Table 1. Global Liquid Runway Deicer Market Size by Type (Tons) & (US\$ Million) & (2023 VS 2030)**

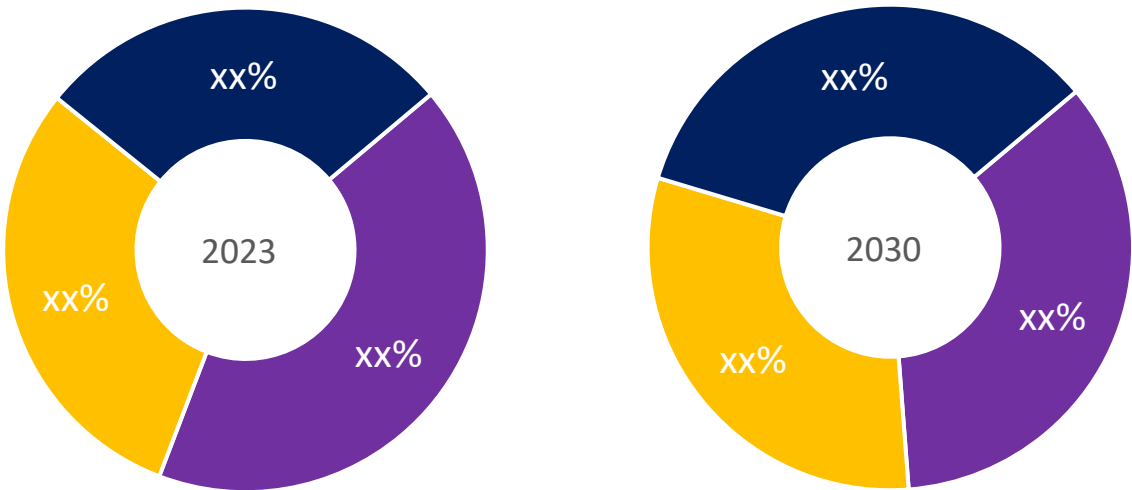
Segment by Type	2023		2030		CAGR (2019- 2023)	CAGR (2024- 2030)
	Production	Value	Production	Value		
Alcohol Based Liquid	XX	XX	XX	XX	XX%	XX%
Sodium Acetate	XX	XX	XX	XX	XX%	XX%
Potassium Acetate						
Sodium Formate						
Potassium Formate						

Total	XX	XX	XX	XX	XX%	XX%
-------	----	----	----	----	-----	-----

Source: Secondary Sources and Research, 2024

The pie chart below shows the market share by Type. In 2022, Alcohol Based Liquid accounted for a major share of xx% the global Liquid Runway Deicer market, this product segment is poised to reach US\$ XX million by 2030 from US\$ XX million in 2022.

Figure 2. Global Liquid Runway Deicer Market Share by Type: 2023 VS 2030



Source: Secondary Sources and Research, 2024

1.2.2 Alcohol Based Liquid

Figure 3. Alcohol Based Liquid Product Picture

Source: Secondary Sources and Research, 2024

1.2.3 Sodium Acetate

Figure 4. Sodium Acetate Product Picture

1.2.4 Potassium Acetate

1.2.5 Sodium Formate

1.2.6 Potassium Formate

Source: Secondary Sources and Research, 2024

### 1.3 Liquid Runway Deicer Segment by Application

Segment by Application, the Liquid Runway Deicer market can be sub-segmented into several major Application, like Commercial Airports, Military Airfields, etc.

This section displays the market size by Application in 2023 and forecast to 2030. The CAGR (2023-2030) is based on the volume of Liquid Runway Deicer by Application and the overall market.

#### 1.3.1 Global Liquid Runway Deicer Market Size YoY Growth Rate Analysis by Application: 2023 VS 2030

Table 2. Global Liquid Runway Deicer Market Size by Application (Tons) & (US\$ Million) & (2023 VS 2030)

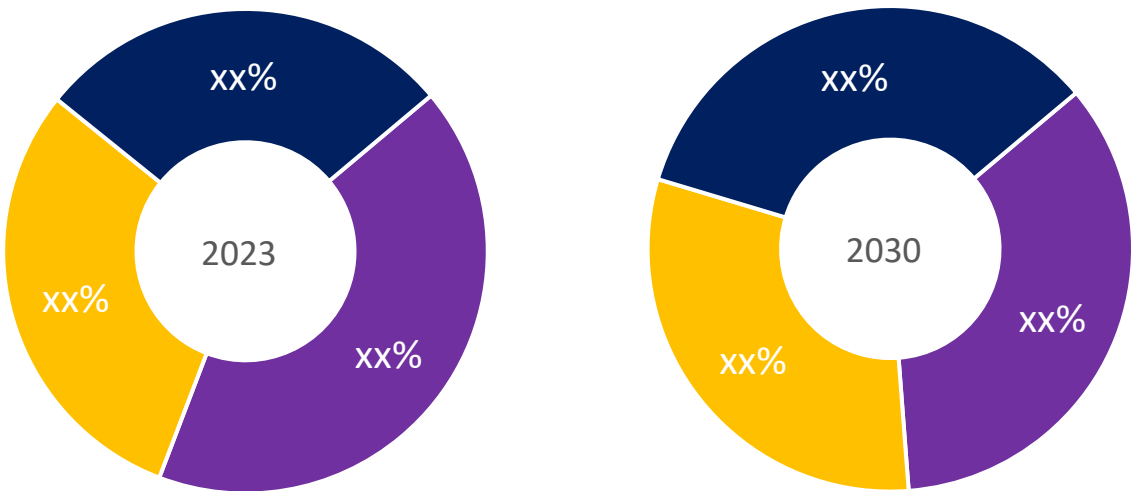
Segment by Application	2023		2030		CAGR	CAGR
	Production	Value	Production	Value	(2019-2023)	(2024-2030)
Commercial Airports	XX	XX	XX	XX	XX%	XX%
Military Airfields	XX	XX	XX	XX	XX%	XX%
General Aviation	XX	XX	XX	XX	XX%	XX%
Helipads	XX	XX	XX	XX	XX%	XX%
Total	XX	XX	XX	XX	XX%	XX%

Source: Secondary Sources and Research, 2024

The following pie chart shows the market share of Liquid Runway Deicer by Application in 2023 and 2030.

In Liquid Runway Deicer market, the Commercial Airports holds an important share, and it is expected to reach a volume of xx by 2030, at a CAGR of xx% during 2023 and 2030.

Figure 5. Global Liquid Runway Deicer Market Share by Application: 2023 VS 2030



Source: Secondary Sources and Research, 2024

1.3.2 Commercial Airports

Figure 6. Commercial Airports

Source: Secondary Sources and Research, 2024

1.3.3 Military Airfields

Figure 7. Military Airfields

Source: Secondary Sources and Research, 2024

1.3.4 General Aviation

Figure 8. General Aviation

Source: Secondary Sources and Research, 2024

1.3.5 Helipads

Figure 9. Helipads

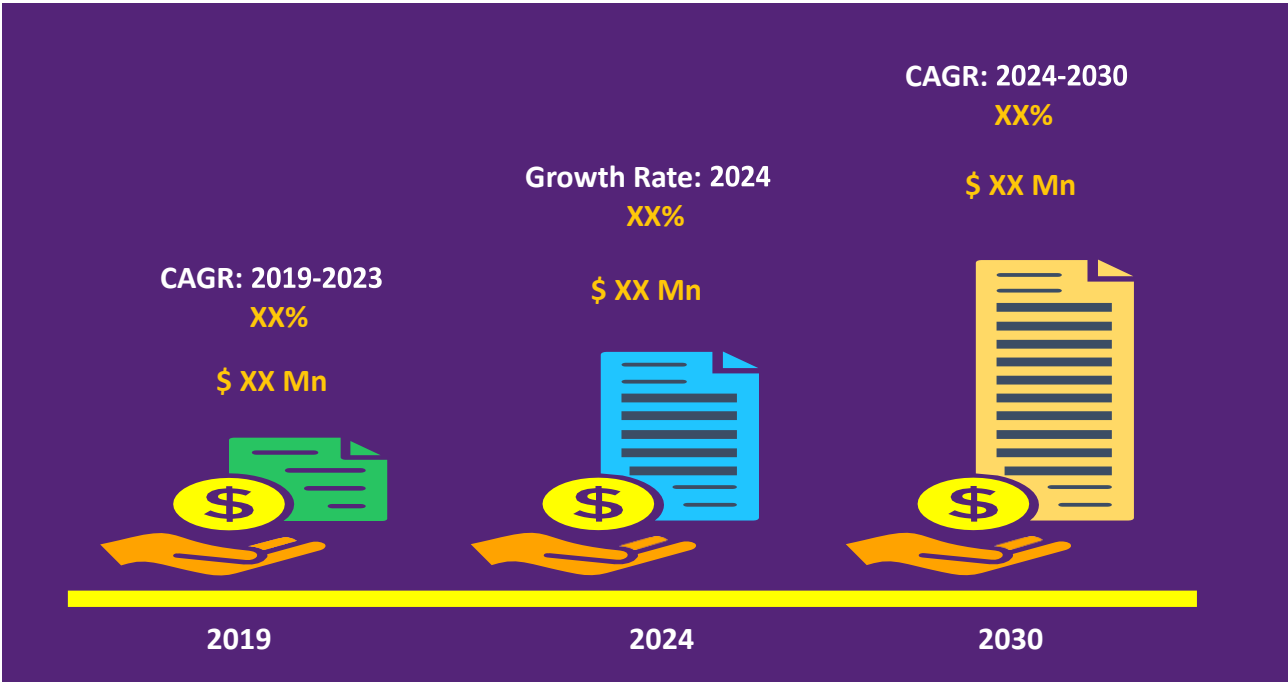
Source: Secondary Sources and Research, 2024

1.4 Global Market Growth Prospects

1.4.1 Global Liquid Runway Deicer Revenue Estimates and Forecasts (2019-2030)

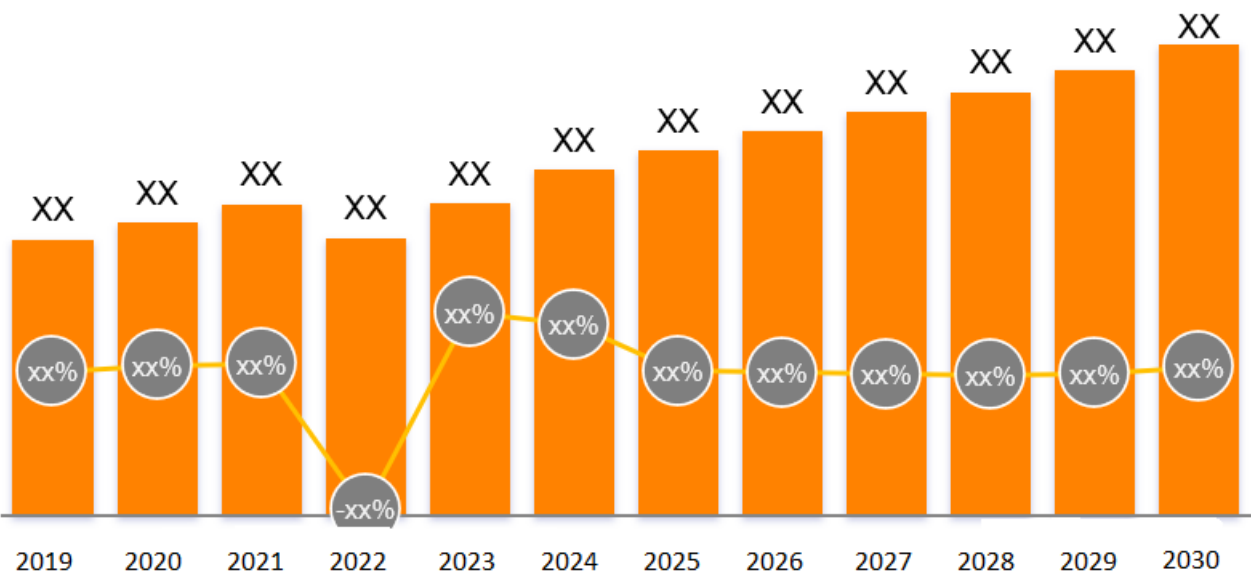
The global Liquid Runway Deicer market was valued at USD XX million in 2023 and is expected to reach USD XX million by the end of 2030, growing at a CAGR of XX% between 2024 and 2030.

Figure 10. Global Liquid Runway Deicer Revenue (US\$ Million), 2019 VS 2023 VS 2030



Source: Secondary Sources, Expert Interviews and Research, 2024

Figure 11. Global Liquid Runway Deicer Revenue (US\$ Million) (2019-2030)

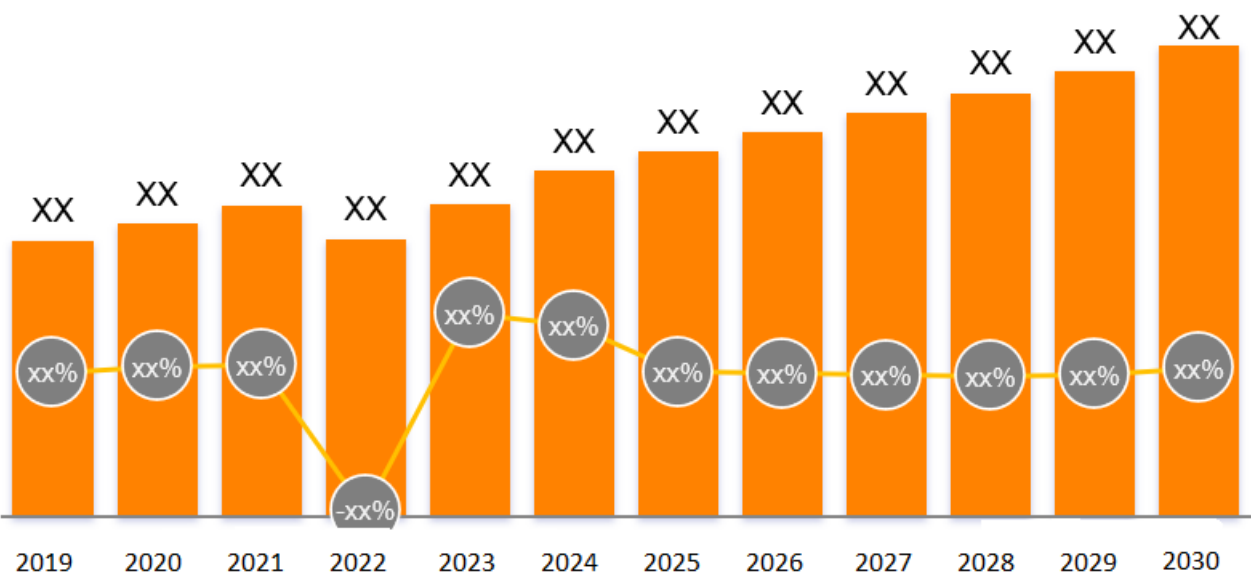


Source: Secondary Sources, Expert Interviews and Research, 2024

1.4.2 Global Liquid Runway Deicer Production Estimates and Forecasts (2019-2030)

In terms of volume, the global Liquid Runway Deicer Production was xx in 2023, and it is predicted to reach xx in 2030.

Figure 12. Global Liquid Runway Deicer Production (Tons) & (2019-2030)



Source: Secondary Sources and Research, 2024

## 1.5 Global Market Size by Region

On basis of geography, the Liquid Runway Deicer market is segmented into North America, Europe, China, Japan, etc.

The data for 2024 is an estimate, based on the history data and the integrated view of industry experts, manufacturers, distributors, and end users, etc.

Top-down and bottom-up approaches are used to validate the global Liquid Runway Deicer market size market and estimate the market size for company, regions segments, product segments and application (end users). In the complete market engineering process, both top-down and bottom-up approaches were extensively used, along with several data triangulation methods, to perform market estimation and market forecasting for the overall market segments and sub-segments listed in this report. Extensive qualitative and further quantitative analysis is also done from all the numbers arrived at in the complete market engineering process to list key information throughout the report.

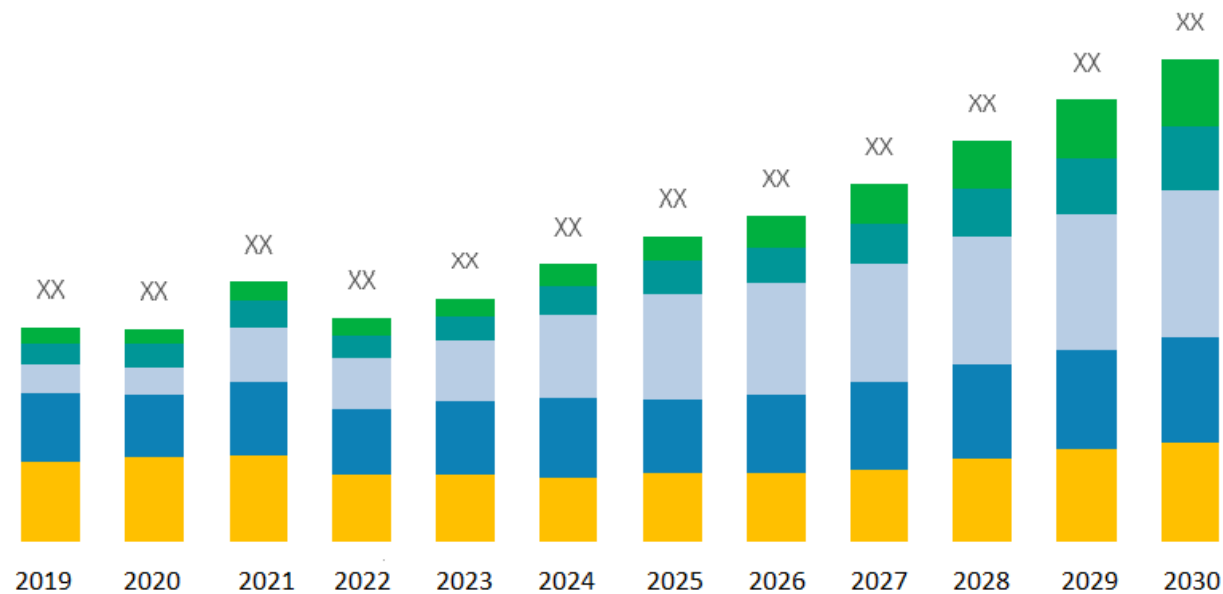
### 1.5.1 Global Liquid Runway Deicer Market Size Estimates and Forecasts by Region: 2019 VS 2023 VS 2030

Table 3. Liquid Runway Deicer Market Size Comparison by Region: 2019 VS 2023 VS 2030

By Region	2019	2023	2030	CAGR: 2019-2023	CAGR: 2024-2030
North America	XX	XX	XX	XX%	XX%
Europe	XX	XX	XX	XX%	XX%
Asia-Pacific	XX	XX	XX	XX%	XX%
South America	XX	XX	XX	XX%	XX%
Other Regions	XX	XX	XX	XX%	XX%
Total	XX	XX	XX	XX%	XX%

Secondary Sources, Press Releases, Expert Interviews and Research, 2024

Figure 13. Liquid Runway Deicer Market Size Comparison by Region: 2018 VS 2023 VS 2030

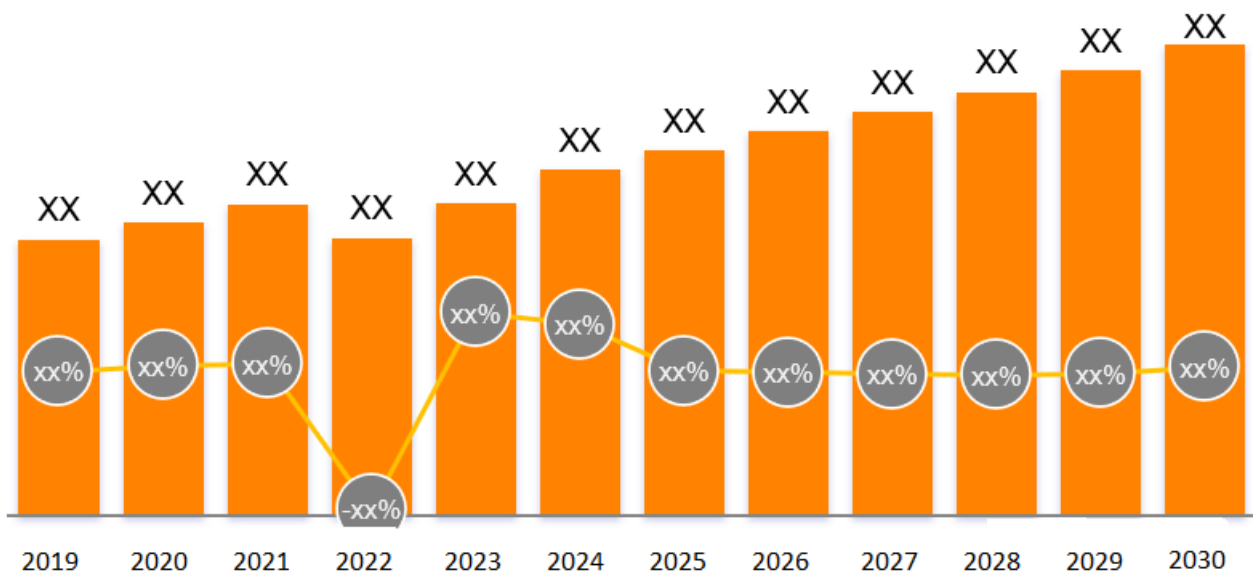


Secondary Sources, Press Releases, Expert Interviews and Research, 2024

1.5.2 North America Liquid Runway Deicer Estimates and Forecasts (2019-2030)

The North America Liquid Runway Deicer market size was US\$ XX million in 2023 and it will be US\$ XX Million in 2030, with a YoY Growth Rate xx.x% from 2024 to 2030.

Figure 14. North America Liquid Runway Deicer Revenue (US\$ Million) YoY Growth Rate (2019-2030)



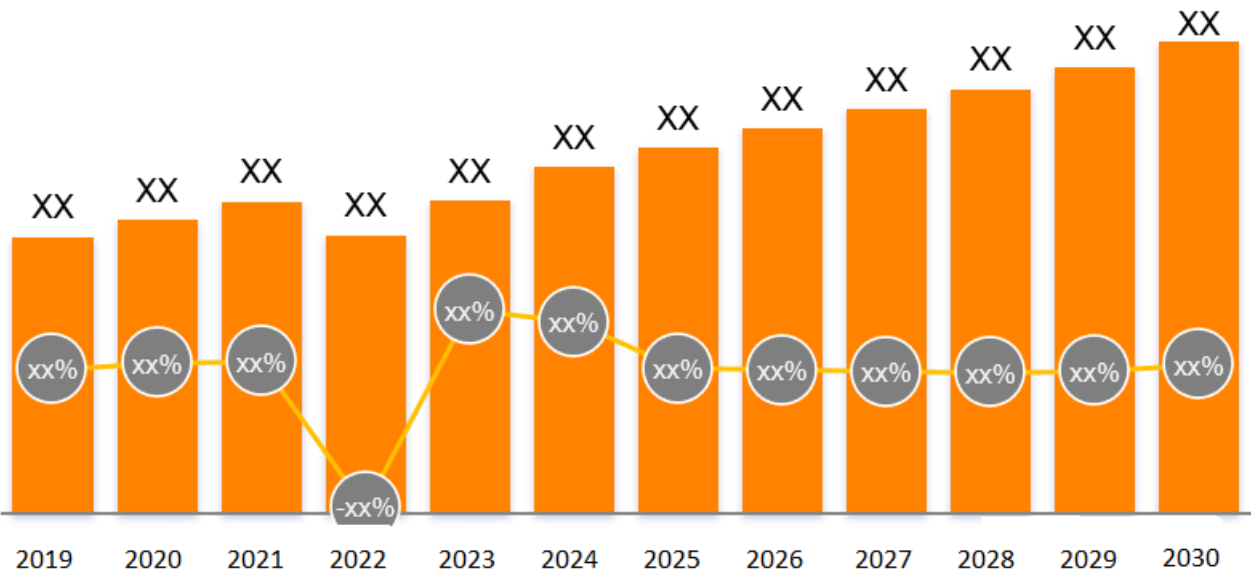
Source: Secondary Sources and Research, 2023



1.5.3 Europe Liquid Runway Deicer Estimates and Forecasts (2019-2030)

The Europe Liquid Runway Deicer market size was US\$ XX million in 2023 and it will be US\$ XX million in 2030, with a YoY Growth Rate xx.x% from 2024 to 2030.

Figure 15. Europe Liquid Runway Deicer Revenue (US\$ Million) YoY Growth Rate (2019-2030)

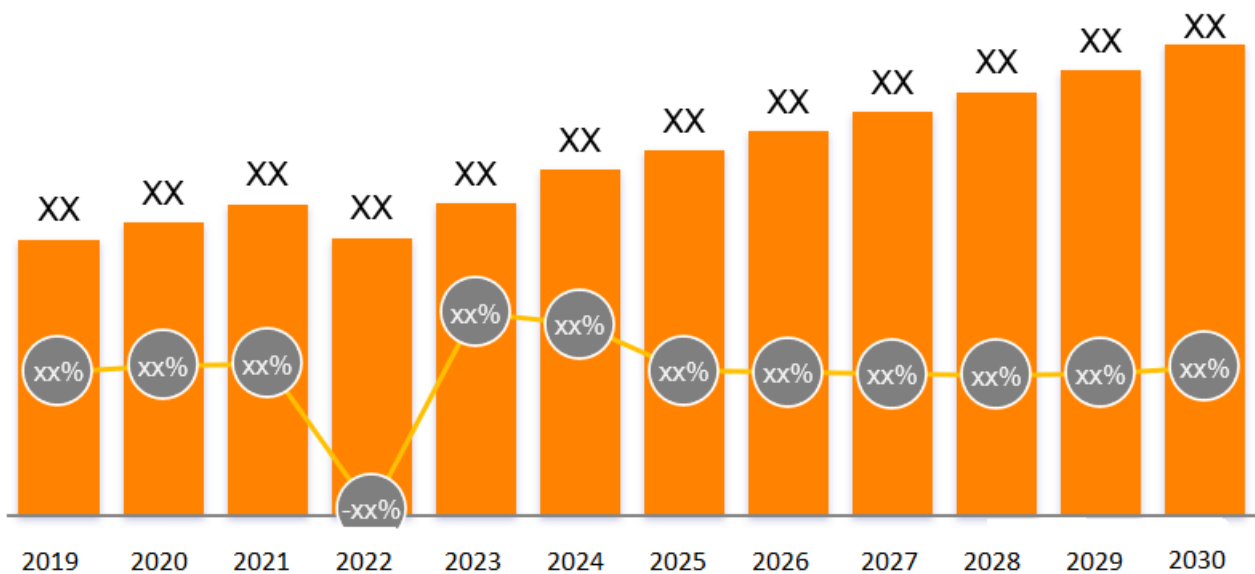


Source: Secondary Sources and Research, 2024

1.5.4 Asia-Pacific Liquid Runway Deicer Estimates and Forecasts (2019-2030)

The Asia-Pacific Liquid Runway Deicer market size was US\$ XX million in 2023 and it will be US\$ XX million in 2030, with a YoY Growth Rate xx.x% from 2024 to 2030.

Figure 16. Asia-Pacific Liquid Runway Deicer Revenue (US\$ Million) YoY Growth Rate (2019-2030)

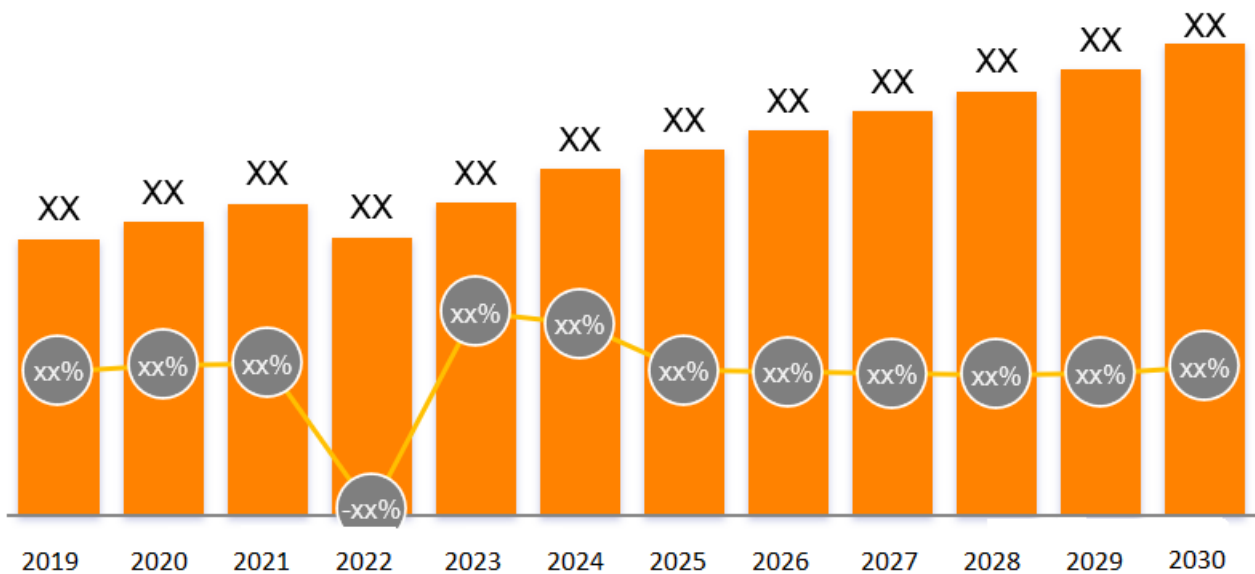


Source: Secondary Sources and Research, 2024

### 1.5.5 South America Liquid Runway Deicer Estimates and Forecasts (2019-2030)

The South America Liquid Runway Deicer market size was US\$ XX million in 2023 and it will be US\$ XX million in 2030, with a YoY Growth Rate xx.x% from 2024 to 2030.

Figure 17. South America Liquid Runway Deicer Revenue (US\$ Million) YoY Growth Rate (2019-2030)

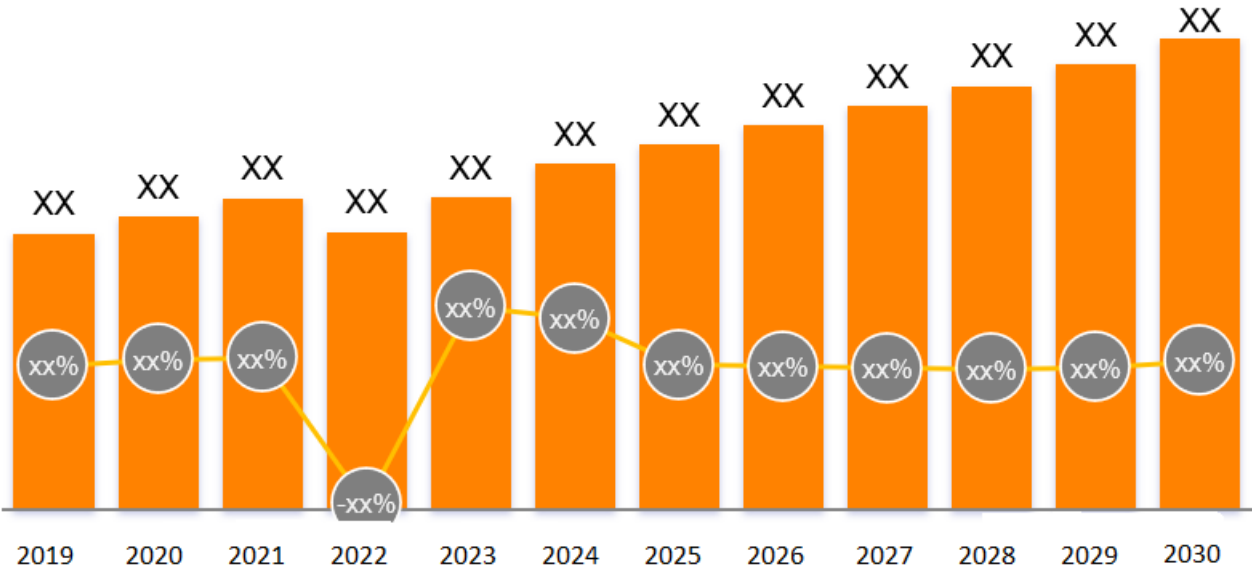


Source: Secondary Sources and Research, 2024

1.5.6 Middle East & Africa Liquid Runway Deicer Estimates and Forecasts (2019-2030)

The Middle East & Africa Liquid Runway Deicer market size was US\$ XX million in 2023 and it will be US\$ XX million in 2030, with a YoY Growth Rate xx.x% from 2024 to 2030.

Figure 18. Middle East & Africa Liquid Runway Deicer Revenue (US\$ Million) YoY Growth Rate (2019-2030)



Source: Secondary Sources and Research, 2024

## 2 Global Growth Trends

## 2.1 Industry Trends

### 2.1.1 SWOT Analysis

### Figure 19. SWOT Analysis



Source: Primary Research and Secondary Research Analysis

#### 2.1.1.1 Strengths

[illegible]

### 2.1.1.2 Weaknesses

[illegible]

[illegible]

### 2.1.1.3 OpportMTies

[illegible]

#### 2.1.1.4 Threats

[illegible]

### 2.1.2 PESTEL Analysis

### Figure 20. PESTEL Analysis



Source: Primary Research and Secondary Research Analysis

### 2.1.2.1 Political Landscape

[illegible]

### 2.1.2.2 Economic Landscape

[illegible]

XX  
XX

### 2.1.2.3 Social Landscape

[illegible]

#### 2.1.2.4 Technological Landscape

[illegible]

#### 2.1.2.5 Environmental Landscape

[illegible]

#### 2.1.2.6 Legal Landscape

[illegible]

### 2.1.3 Porter's Five Forces Analysis

Figure 21. Porter's Five Forces Analysis



Source: Primary Research and Secondary Research Analysis

#### 2.1.3.1 Bargaining Power of Suppliers

XX  
XX  
XX  
XX



### 2.1.3.2 Bargaining Power of Buyers

[illegible]

#### 2.1.3.3 Threat of Substitute

[illegible]

#### 2.1.3.4 Threat of New Entrant

[illegible]

### 2.1.3.5 Competitive Rivalry

[illegible]

## 2.2 Potential Market and Growth Potential Analysis

*Global Liquid Runway Deicer Market is estimated to be worth USD XXX Million in 2023 and is projected to grow at a CAGR of XX% between 2023 to 2030.*

The data for 2024 is an estimate, based on the historical data and the integrated view of industrial experts, manufacturers, and distributors, etc.

Top-down and bottom-up approaches are used to validate the global Liquid Runway Deicer Market and to estimate the Market for segment, and channel. In the complete market entree global Liquid Runway Deicer both top-down and bottom-up approaches along with several data triangulation methods have been extensively utilized to perform market estimation and market forecast for the overall market division and subdivision listed in this report. Extensive qualitative and further quantitative analysis has also been done from all the numbers arrived at in the complete market to list key information throughout the report.

### 3 Market Competition by Manufacturers

#### 3.1 Global Liquid Runway Deicer Production by Manufacturers (2019-2023)

This report focuses on the major manufacturers of Liquid Runway Deicer around the world. The following table shows the Liquid Runway Deicer production and revenue of these companies, in 2023.

The below details the Liquid Runway Deicer production and market share of major manufacturers, from 2019 to 2023. The data for 2024 is an estimate, based on the historical figures and the data we interviewed this year.

Major manufacturers in the market are identified through secondary research and their market revenues determined through primary and secondary research. Secondary research included the research of the annual and financial reports of the top companies, whereas primary research included extensive interviews of key opinion leaders and industry experts such as experienced front-line staff, directors, CEOs, and marketing executives. The percentage splits, market share, YoY Growth Rate and breakdowns of the product markets are determined through using secondary sources and verified through the primary sources.

**Table 4. Global Liquid Runway Deicer Production by Manufacturers (2019-2023) & (Tons)**

Company	2019	2020	2021	2022	2023	2024
Cryotech	XX	XX	XX	XX	XX	XX
Provion	XX	XX	XX	XX	XX	XX
Perstorp	XX	XX	XX	XX	XX	XX
Clariant	XX	XX	XX	XX	XX	XX
LNT Group	XX	XX	XX	XX	XX	XX
TR Bonnyman Son & Company	XX	XX	XX	XX	XX	XX
KILFROST	XX	XX	XX	XX	XX	XX
Harmony Deicing	XX	XX	XX	XX	XX	XX
Esseco	XX	XX	XX	XX	XX	XX
Seneca	XX	XX	XX	XX	XX	XX
OMEX	XX	XX	XX	XX	XX	XX
Pelican Chemicals	XX	XX	XX	XX	XX	XX
UltraBlue	XX	XX	XX	XX	XX	XX
Boschung	XX	XX	XX	XX	XX	XX
Bare Ground						
Eastman						
Others	XX	XX	XX	XX	XX	XX
Total	XX	XX	XX	XX	XX	XX

Source: Above companies; Secondary Sources, Expert Interviews and Research, 2024

**Table 5. Global Liquid Runway Deicer Production Market Share by Manufacturers (2019-2023)**

Company	2019	2020	2021	2022	2023	2024
Cryotech	XX%	XX%	XX%	XX%	XX%	XX%
Proviron	XX%	XX%	XX%	XX%	XX%	XX%
Perstorp	XX%	XX%	XX%	XX%	XX%	XX%
Clariant	XX%	XX%	XX%	XX%	XX%	XX%
LNT Group	XX%	XX%	XX%	XX%	XX%	XX%
TR Bonnyman Son & Company	XX%	XX%	XX%	XX%	XX%	XX%
KILFROST	XX%	XX%	XX%	XX%	XX%	XX%
Harmony Deicing	XX%	XX%	XX%	XX%	XX%	XX%
Esseco	XX%	XX%	XX%	XX%	XX%	XX%
Seneca	XX%	XX%	XX%	XX%	XX%	XX%
OMEX	XX%	XX%	XX%	XX%	XX%	XX%
Pelican Chemicals	XX%	XX%	XX%	XX%	XX%	XX%
UltraBlue	XX%	XX%	XX%	XX%	XX%	XX%
Boschung	XX%	XX%	XX%	XX%	XX%	XX%
Bare Ground						
Eastman						
Others	XX%	XX%	XX%	XX%	XX%	XX%
Total	XX%	XX%	XX%	XX%	XX%	XX%

Source: Above companies; Secondary Sources, Expert Interviews and Research, 2024

**Figure 22. Liquid Runway Deicer Production Share by Manufacturers in 2023**

Source: Above companies; Secondary Sources, Expert Interviews and Research, 2023

### 3.2 Global Liquid Runway Deicer Revenue Market Share by Manufacturers (2019-2023)

The market estimations in this report are based on the ex-factory price of Liquid Runway Deicer (excluding any discounts provided by the manufacturers, distributors, wholesalers, or traders).

The table below details the Liquid Runway Deicer revenue and market share of major manufacturers, from 2019 to 2023.

The data for 2024 is an estimate, based on the historical figures and the data we interviewed this year.

**Table 6. Global Liquid Runway Deicer Revenue by Manufacturers (2019-2024) & (US\$ Million)**

Company	2019	2020	2021	2022	2023	2024
Cryotech	XX	XX	XX	XX	XX	XX
Proviron	XX	XX	XX	XX	XX	XX
Perstorp	XX	XX	XX	XX	XX	XX
Clariant	XX	XX	XX	XX	XX	XX
LNT Group	XX	XX	XX	XX	XX	XX
TR Bonnyman Son & Company	XX	XX	XX	XX	XX	XX
KILFROST	XX	XX	XX	XX	XX	XX
Harmoney Deicing	XX	XX	XX	XX	XX	XX
Esseco	XX	XX	XX	XX	XX	XX
Seneca	XX	XX	XX	XX	XX	XX
OMEX	XX	XX	XX	XX	XX	XX
Pelican Chemicals	XX	XX	XX	XX	XX	XX
UltraBlue	XX	XX	XX	XX	XX	XX
Boschung	XX	XX	XX	XX	XX	XX
Bare Ground						
Eastman						
Others	XX	XX	XX	XX	XX	XX
Total	XX	XX	XX	XX	XX	XX

Source: Above companies; Secondary Sources, Expert Interviews and Research, 2024

**Table 7. Global Liquid Runway Deicer Revenue Share by Manufacturers (2019-2023)**

Company	2019	2020	2021	2022	2023	2024
Cryotech	XX%	XX%	XX%	XX%	XX%	XX%
Proviron	XX%	XX%	XX%	XX%	XX%	XX%
Perstorp	XX%	XX%	XX%	XX%	XX%	XX%
Clariant	XX%	XX%	XX%	XX%	XX%	XX%
LNT Group	XX%	XX%	XX%	XX%	XX%	XX%
TR Bonnyman Son & Company	XX%	XX%	XX%	XX%	XX%	XX%
KILFROST	XX%	XX%	XX%	XX%	XX%	XX%
Harmoney Deicing	XX%	XX%	XX%	XX%	XX%	XX%
Esseco	XX%	XX%	XX%	XX%	XX%	XX%
Seneca	XX%	XX%	XX%	XX%	XX%	XX%
OMEX	XX%	XX%	XX%	XX%	XX%	XX%
Pelican Chemicals	XX%	XX%	XX%	XX%	XX%	XX%
UltraBlue	XX%	XX%	XX%	XX%	XX%	XX%
Boschung	XX%	XX%	XX%	XX%	XX%	XX%

Bare Ground						
Eastman						
Others	XX%	XX%	XX%	XX%	XX%	XX%
Total	XX%	XX%	XX%	XX%	XX%	XX%

Source: Above companies; Secondary Sources, Expert Interviews and Research, 2024

**Figure 23. Global Liquid Runway Deicer Revenue Share by Manufacturers in 2023**

Source: Above companies; Secondary Sources, Expert Interviews and Research, 2024

### 3.3 Liquid Runway Deicer Market Share by Company Type (Tier 1, Tier 2, and Tier 3)

At present, the Liquid Runway Deicer players have formed a competition form between the first tier and the second tier and the third tier.

Note: the 3 tiers of companies are defined based on their revenue in Liquid Runway Deicer as of 2023. Tier 1=> US\$ xx million, Tier 2= US\$ xx million to US\$ xx million, and Tier 3=< US\$ xx million.

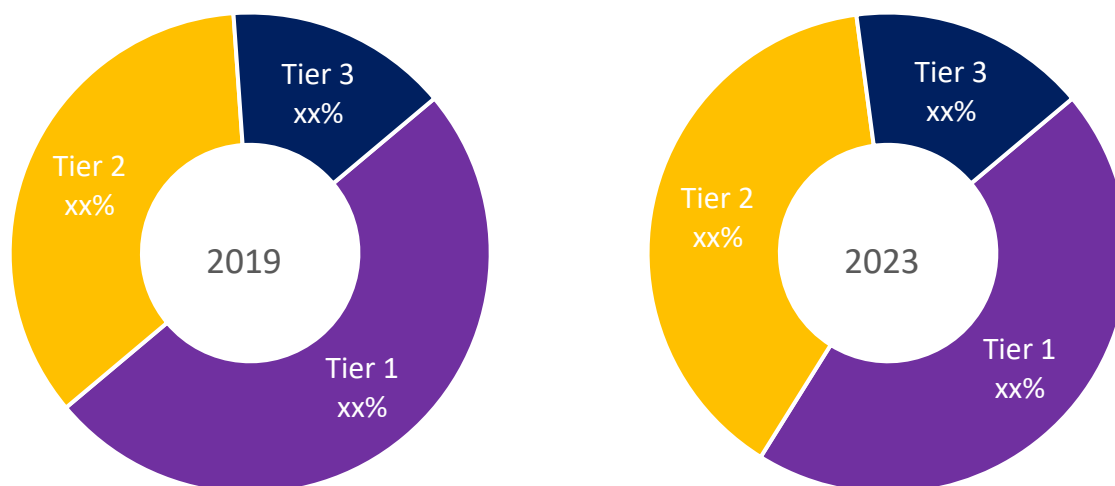
**Table 8. Company Type (Tier 1, Tier 2, and Tier 3) & (based on the Revenue in Liquid Runway Deicer as of 2023)**

Company	Revenue (US\$ Million) in 2023	Company Type (Sample)
Cryotech	XX	Tier 1
Provion	XX	Tier 1
Perstorp	XX	Tier 2
Clariant	XX	Tier 2
LNT Group	XX	Tier 3
TR Bonnyman Son & Company	XX	Tier 3
KILFROST	XX	Tier 1
Harmony Deicing	XX	Tier 1
Esseco	XX	Tier 2
Seneca	XX	Tier 2
OMEX	XX	Tier 3
Pelican Chemicals	XX	Tier 3
UltraBlue	XX	Tier 1
Boschung	XX	Tier 1
Bare Ground		
Eastman		

Others	XX
Total	XX

Source: Above companies; Secondary Sources, Expert Interviews and Research, 2024

**Figure 24. Liquid Runway Deicer Market Share by Company Type (Tier 1, Tier 2, and Tier 3): 2019 VS 2023**



Source: Above companies; Secondary Sources, Expert Interviews and Research, 2024

### 3.4 Global Liquid Runway Deicer Average Price by Manufacturers (2019-2023)

The table below shows the average ex-factory price of Liquid Runway Deicer for each company, based on the revenue and production of Liquid Runway Deicer.

**Table 9. Global Market Liquid Runway Deicer Average Price (US\$/Ton) of Key Manufacturers (2019-2023)**

Company	2018	2019	2020	2021	2022	2023
Cryotech	XX	XX	XX	XX	XX	XX
Proviron	XX	XX	XX	XX	XX	XX
Perstorp	XX	XX	XX	XX	XX	XX
Clariant	XX	XX	XX	XX	XX	XX
LNT Group	XX	XX	XX	XX	XX	XX
TR Bonnyman Son & Company	XX	XX	XX	XX	XX	XX
KILFROST	XX	XX	XX	XX	XX	XX
Harmony Deicing	XX	XX	XX	XX	XX	XX
Esseco	XX	XX	XX	XX	XX	XX
Seneca	XX	XX	XX	XX	XX	XX

OMEX	XX	XX	XX	XX	XX	XX
Pelican Chemicals	XX	XX	XX	XX	XX	XX
UltraBlue	XX	XX	XX	XX	XX	XX
Boschung	XX	XX	XX	XX	XX	XX
Bare Ground						
Eastman						

Source: Above companies; Secondary Sources, Expert Interviews and Research, 2024

**Figure 25. Global Market Liquid Runway Deicer Average Price (US\$/Ton) of Key Manufacturers in 2023**

Source: Above companies; Secondary Sources, Expert Interviews and Research, 2024

### 3.5 Manufacturers Liquid Runway Deicer Production Sites, Area Served, Product Type

**Table 10. Manufacturers Liquid Runway Deicer Production Sites and Area Served**

Company	Manufacturing Sites	Headquarters	Area Served
Cryotech	XX	XX	XX
Proviron	XX	XX	XX
Perstorp	XX	XX	XX
Clariant	XX	XX	XX
LNT Group	XX	XX	XX
TR Bonnyman Son & Company	XX	XX	XX
KILFROST	XX	XX	XX
Harmony Deicing	XX	XX	XX
Esseco	XX	XX	XX
Seneca	XX	XX	XX
OMEX	XX	XX	XX
Pelican Chemicals	XX	XX	XX
UltraBlue	XX	XX	XX
Boschung	XX	XX	XX
Bare Ground			
Eastman			

Source: Above companies; Secondary Sources, Expert Interviews and Research, 2024

**Table 11. Manufacturers Liquid Runway Deicer Product Type**

Company	Product Type
Cryotech	Alcohol Based Liquid
Proviron	XX
Perstorp	XX
Clariant	XX
LNT Group	XX
TR Bonnyman Son & Company	XX
KILFROST	XX
Harmony Deicing	XX
Esseco	XX
Seneca	XX
OMEX	XX
Pelican Chemicals	XX
UltraBlue	XX
Boschung	XX
Bare Ground	
Eastman	

Source: Above companies; Secondary Sources, Expert Interviews and Research, 2024

## 3.6 Liquid Runway Deicer Market Competitive Situation and Trends

### 3.6.1 Liquid Runway Deicer Market Concentration Rate

The standard tools of competition economists and competition authorities to measure market concentration are the Herfindahl-Hirschman Index (HHI) and the concentration ratios (CR(n)).

The Herfindahl-Hirschman Index (HHI) is a common measure of market concentration that is used to determine market competitiveness. The Herfindahl-Hirschman Index (HHI) is a commonly accepted measure of market concentration. It is calculated by squaring the market share of each firm competing in a market and then summing the resulting numbers. It can range from close to zero to 10,000.

The concentration ratio is the percentage of market share owned by the largest n firms in an industry, where n is a specified number of firms. In this report, we present the CR5, means the market share of the five largest firms.

Below table details the market concentration ratio in the past three years. The top five manufacturers held xx% of the market, in terms of Liquid Runway Deicer revenue in 2023.



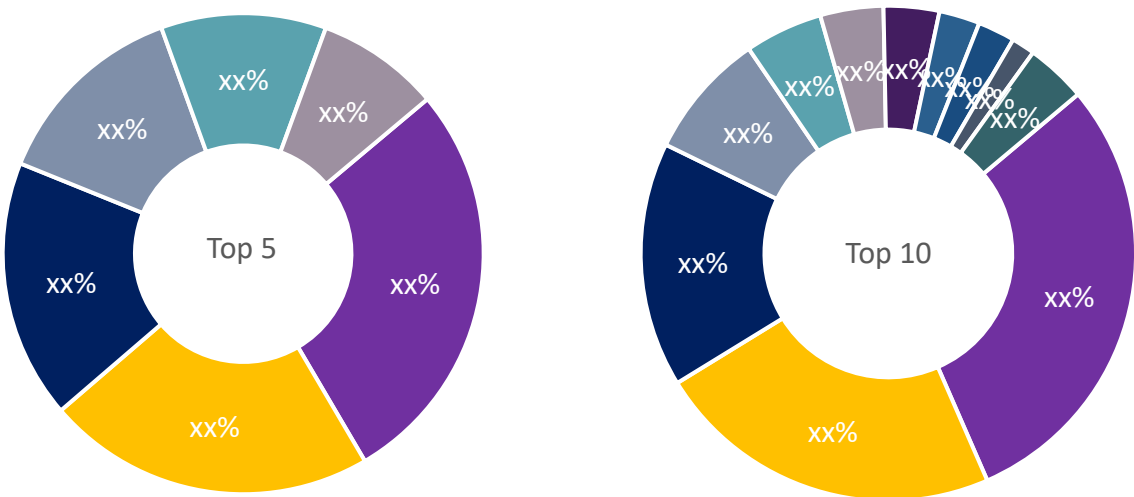
Table 12. Global Liquid Runway Deicer Manufacturers Market Concentration Ratio (CR5 and HHI)

	Company	2022	2023	2024
1	Cryotech	xx%	xx%	xx%
2	Proviron	xx%	xx%	xx%
3	Perstorp	xx%	xx%	xx%
4	Clariant	xx%	xx%	xx%
5	LNT Group	xx%	xx%	xx%
	CR 5	xx%	xx%	xx%
	HHI	xx	xx	xx

Source: Above companies; Secondary Sources and Research, 2024

3.6.2 Global 5 and 10 Largest Liquid Runway Deicer Players Market Share by Revenue

Figure 26. The Global 5 and 10 Largest Players: Market Share by Liquid Runway Deicer Revenue in 2023



Source: Above companies; Secondary Sources and Research, 2024

3.6.3 Mergers & Acquisitions, Expansion

Table 13. Mergers & Acquisitions, Expansion Plans

Date	Business Activity	Details

Source: Above companies; Secondary Sources, Expert Interviews and Research, 2024

## 4 Production by Region

According to our research, the producers of Liquid Runway Deicer mainly include North America, Europe, China, Japan, etc.

This chapter focuses on the Liquid Runway Deicer production by region (country), provide the market facts & figures for major regions (countries).

### 4.1 Global Production of Liquid Runway Deicer by Region (2019-2024)

Table 14. Global Liquid Runway Deicer Production (Tons) by Region (2019-2024)

By Region	2019	2020	2021	2022	2023	2024
North America	XX	XX	XX	XX	XX	XX
Europe	XX	XX	XX	XX	XX	XX
Asia-Pacific	XX	XX	XX	XX	XX	XX
South America	XX	XX	XX	XX	XX	XX
Middle East & Africa						
Other Regions	XX	XX	XX	XX	XX	XX
Total	XX	XX	XX	XX	XX	XX

Source: Secondary Sources and Research, 2024

Figure 27. Global Liquid Runway Deicer Production Market Share by Region (2019-2024)

By Region	2019	2020	2021	2022	2023	2024
North America	XX%	XX%	XX%	XX%	XX%	XX%
Europe	XX%	XX%	XX%	XX%	XX%	XX%
Asia-Pacific	XX%	XX%	XX%	XX%	XX%	XX%
South America	XX%	XX%	XX%	XX%	XX%	XX%
Middle East & Africa						
Other Regions	XX%	XX%	XX%	XX%	XX%	XX%
Total	100%	100%	100%	100%	100%	100%

Source: Secondary Sources and Research, 2024

## 4.2 Global Liquid Runway Deicer Revenue Market Share by Region (2019-2024)

**Table 15. Global Liquid Runway Deicer Revenue (US\$ Million) by Region (2019-2024)**

By Region	2019	2020	2021	2022	2023	2024
North America	XX	XX	XX	XX	XX	XX
Europe	XX	XX	XX	XX	XX	XX
Asia-Pacific	XX	XX	XX	XX	XX	XX
South America	XX	XX	XX	XX	XX	XX
Other Regions	XX	XX	XX	XX	XX	XX
Total	XX	XX	XX	XX	XX	XX

Source: Secondary Sources and Research, 2023

**Table 16. Global Liquid Runway Deicer Revenue Market Share by Region (2019-2024)**

By Region	2019	2020	2021	2022	2023	2024
North America	XX%	XX%	XX%	XX%	XX%	XX%
Europe	XX%	XX%	XX%	XX%	XX%	XX%
Asia-Pacific	XX%	XX%	XX%	XX%	XX%	XX%
South America	XX%	XX%	XX%	XX%	XX%	XX%
Other Regions	XX%	XX%	XX%	XX%	XX%	XX%
Total	100%	100%	100%	100%	100%	100%

Source: Secondary Sources and Research, 2024

## 4.3 Global Liquid Runway Deicer Production, Revenue, Price and Gross Margin (2019-2024)

**Table 17. Global Liquid Runway Deicer Production (Tons), Revenue (US\$ Million), Price (US\$/Ton) and Gross Margin (2019-2023)**

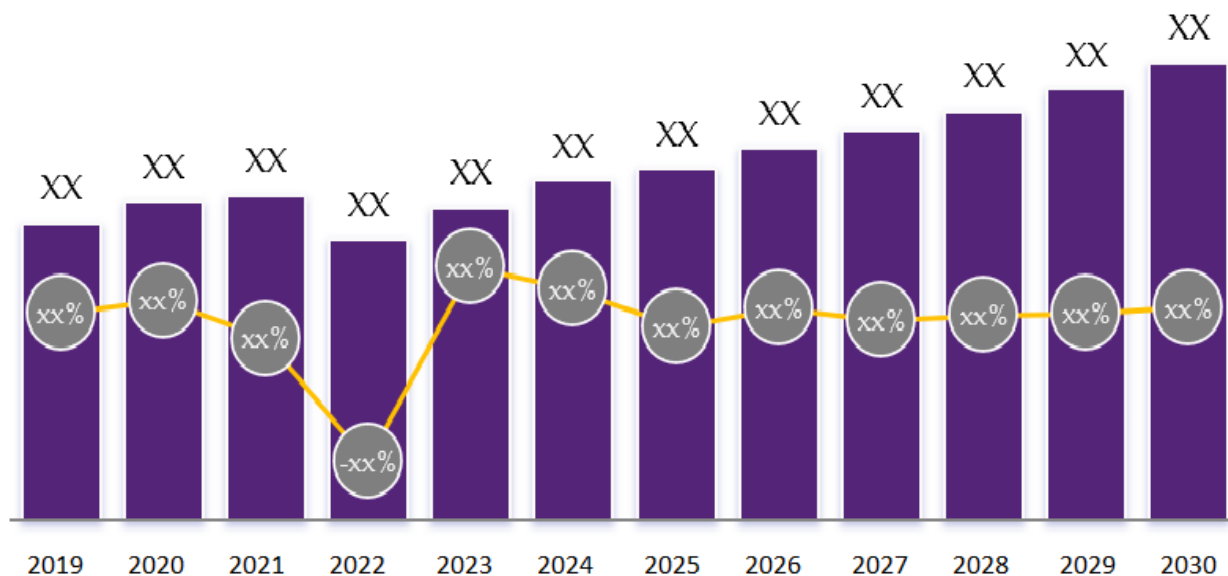
Global	2019	2020	2021	2022	2023	2024
Production	XX	XX	XX	XX	XX	XX
Revenue	XX	XX	XX	XX	XX	XX
Price	XX	XX	XX	XX	XX	XX
Gross Margin	XX%	XX%	XX%	XX%	XX%	XX%

Source: Secondary Sources and Research, 2024

## 4.4 North America Liquid Runway Deicer Production

### 4.4.1 North America Liquid Runway Deicer Production YoY Growth Rate (2019-2023)

**Figure 28. North America Liquid Runway Deicer Production (Tons) YoY Growth Rate (2019-2023)**



Source: Secondary Sources and Research, 2023

### 4.4.2 North America Liquid Runway Deicer Production, Revenue, Price and Gross Margin (2019-2024)

**Table 18. North America Liquid Runway Deicer Production (Tons), Revenue (US\$ Million), Price (US\$/Ton) and Gross Margin (2019-2024)**

North America	2019	2020	2021	2022	2023	2024
Production	XX	XX	XX	XX	XX	XX
Revenue	XX	XX	XX	XX	XX	XX
Price	XX	XX	XX	XX	XX	XX
Gross Margin	XX%	XX%	XX%	XX%	XX%	XX%

Source: Secondary Sources and Research, 2024

## 4.5 Europe Liquid Runway Deicer Production

### 4.5.1 Europe Liquid Runway Deicer Production YoY Growth Rate (2019-2024)

**Figure 29. Europe Liquid Runway Deicer Production (Tons) YoY Growth Rate (2019-2024)**

Source: Secondary Sources and Research, 2024

#### 4.5.2 Europe Liquid Runway Deicer Production, Revenue, Price and Gross Margin (2019-2024)

**Table 19. Europe Liquid Runway Deicer Production (Tons), Revenue (US\$ Million), Price (US\$/Ton) and Gross Margin (2019-2024)**

Europe	2019	2020	2021	2022	2023	2024
Production	XX	XX	XX	XX	XX	XX
Revenue	XX	XX	XX	XX	XX	XX
Price	XX	XX	XX	XX	XX	XX
Gross Margin	XX%	XX%	XX%	XX%	XX%	XX%

Source: Secondary Sources and Research, 2024

### 4.6 Asia-Pacific Liquid Runway Deicer Production (2019-2024)

#### 4.6.1 Asia-Pacific Liquid Runway Deicer Production YoY Growth Rate (2019-2024)

**Figure 30. Asia-Pacific Liquid Runway Deicer Production (Tons) YoY Growth Rate (2019-2024)**

Source: Secondary Sources and Research, 2024

#### 4.6.2 Asia-Pacific Liquid Runway Deicer Production, Revenue, Price and Gross Margin (2019-2024)

**Table 20. Asia-Pacific Liquid Runway Deicer Production (Tons), Revenue (US\$ Million), Price (US\$/Ton) and Gross Margin (2019-2024)**

China	2019	2020	2021	2022	2023	2024
Production	XX	XX	XX	XX	XX	XX
Revenue	XX	XX	XX	XX	XX	XX
Price	XX	XX	XX	XX	XX	XX
Gross Margin	XX%	XX%	XX%	XX%	XX%	XX%

Source: Secondary Sources and Research, 2024

### 4.7 South America Liquid Runway Deicer Production (2019-2024)

#### 4.7.1 South America Liquid Runway Deicer Production YoY Growth Rate (2019-2024)

**Figure 31. South America Liquid Runway Deicer Production (Tons) YoY Growth Rate (2019-2024)**

Source: Secondary Sources and Research, 2024

4.7.2 South America Liquid Runway Deicer Production, Revenue, Price and Gross Margin (2019-2024)

Table 21. South America Liquid Runway Deicer Production (Tons), Revenue (US\$ Million), Price (US\$/Ton) and Gross Margin (2019-2024)

Japan	2019	2020	2021	2022	2023	2024
Production	XX	XX	XX	XX	XX	XX
Revenue	XX	XX	XX	XX	XX	XX
Price	XX	XX	XX	XX	XX	XX
Gross Margin	XX%	XX%	XX%	XX%	XX%	XX%

Source: Secondary Sources and Research, 2024

4.8 Middle East & Africa Liquid Runway Deicer Production (2019-2024)

4.8.1 Middle East & Africa Liquid Runway Deicer Production YoY Growth Rate (2019-2024)

Figure 32. Middle East & Africa Liquid Runway Deicer Production (Tons) YoY Growth Rate (2019-2024)

Source: Secondary Sources and Research, 2024

4.8.2 Middle East & Africa Liquid Runway Deicer Production, Revenue, Price and Gross Margin (2019-2024)

Table 22. Middle East & Africa Liquid Runway Deicer Production (Tons), Revenue (US\$ Million), Price (US\$/Ton) and Gross Margin (2019-2024)

Japan	2019	2020	2021	2022	2023	2024
Production	XX	XX	XX	XX	XX	XX
Revenue	XX	XX	XX	XX	XX	XX
Price	XX	XX	XX	XX	XX	XX
Gross Margin	XX%	XX%	XX%	XX%	XX%	XX%

Source: Secondary Sources and Research, 2024

## 5 Liquid Runway Deicer Consumption by Region

### 5.1 Global Liquid Runway Deicer Consumption by Region

#### 5.1.1 Global Liquid Runway Deicer Consumption by Region

Table 23. Global Liquid Runway Deicer Consumption by Region (2019-2024) & (Tons)

By Region	2019	2020	2021	2022	2023	2024
North America	XX	XX	XX	XX	XX	XX
Europe	XX	XX	XX	XX	XX	XX
Asia-Pacific	XX	XX	XX	XX	XX	XX
South America	XX	XX	XX	XX	XX	XX
Middle East & Africa						
Rest of World	XX	XX	XX	XX	XX	XX
Total	XX	XX	XX	XX	XX	XX

Source: Secondary Sources, Expert Interviews and Research, 2024

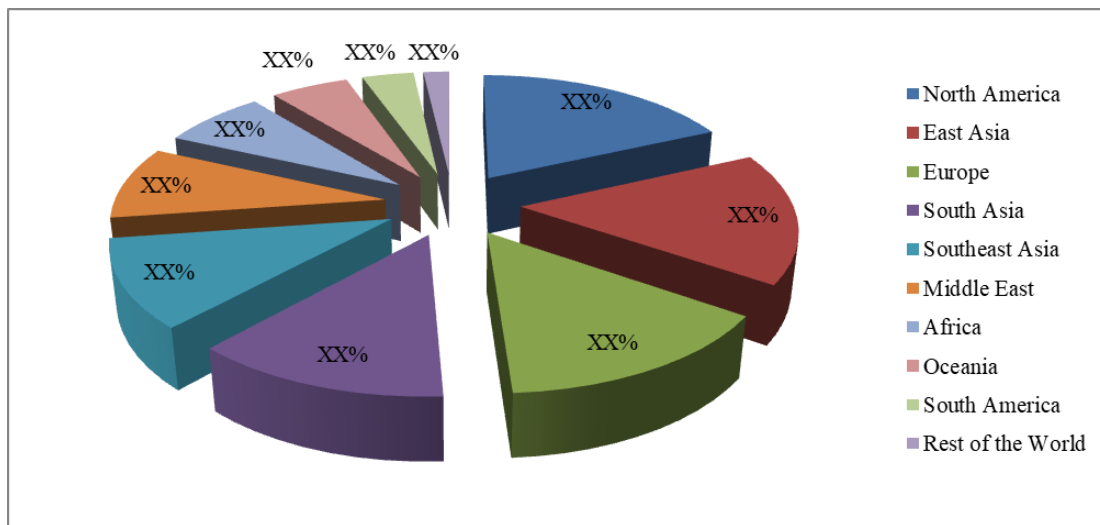
#### 5.1.2 Global Liquid Runway Deicer Consumption Market Share by Region

Table 24. Global Liquid Runway Deicer Consumption Market Share by Region (2019-2024)

By Region	2019	2020	2021	2022	2023	2024
North America	XX%	XX%	XX%	XX%	XX%	XX%
Europe	XX%	XX%	XX%	XX%	XX%	XX%
Asia-Pacific	XX%	XX%	XX%	XX%	XX%	XX%
South America	XX%	XX%	XX%	XX%	XX%	XX%
Middle East & Africa						
Rest of World	XX%	XX%	XX%	XX%	XX%	XX%
Total	XX%	XX%	XX%	XX%	XX%	XX%

Source: Secondary Sources, Expert Interviews and Research, 2024

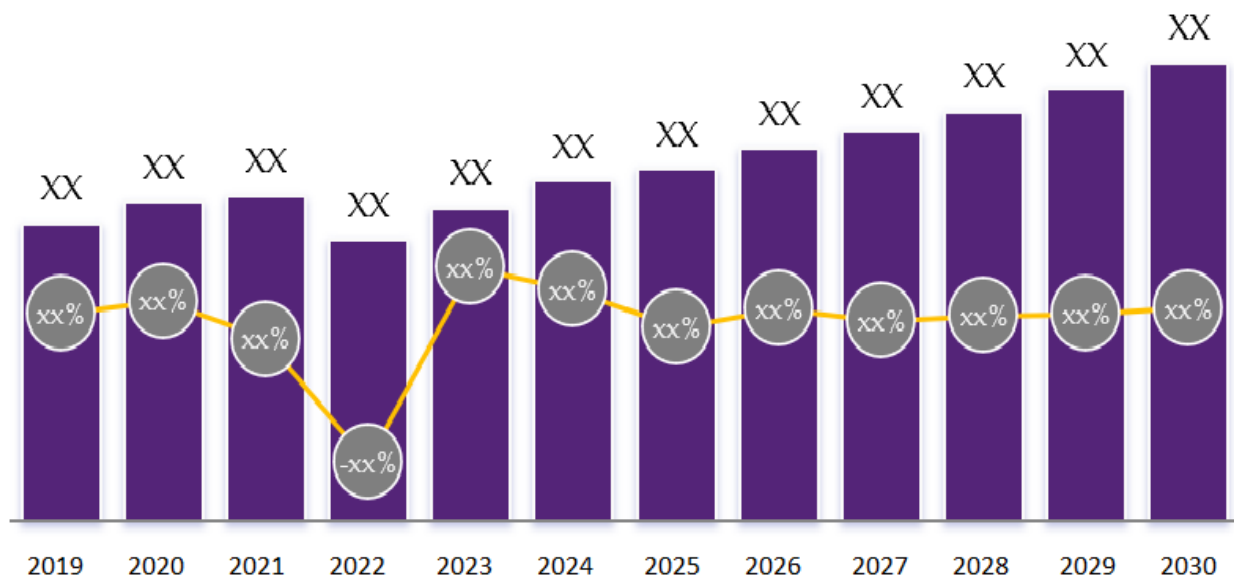
Figure 33. Global Liquid Runway Deicer Consumption Market Share by Region (2019-2024)



Source: Secondary Sources, Expert Interviews and Research, 2024

## 5.2 North America

Figure 34. North America Liquid Runway Deicer Consumption and YoY Growth Rate (2019-2024) &amp; (Tons)



Source: Secondary Sources, Expert Interviews and Research, 2023

### 5.2.1 North America Liquid Runway Deicer Consumption by Country

Table 25. North America Liquid Runway Deicer Consumption by Country (2019-2024) &amp; (Tons)

North America	2019	2020	2021	2022	2023	2024
---------------	------	------	------	------	------	------



U.S.	XX	XX	XX	XX	XX	XX
Canada	XX	XX	XX	XX	XX	XX
Total	XX	XX	XX	XX	XX	XX

Source: Secondary Sources, Expert Interviews and Research, 2024

5.2.2 North America LIQUID RUNWAY DEICER Sales, Consumption, Export, Import (2019-2023)

Table 26. North America LIQUID RUNWAY DEICER Sales, Consumption, Export, Import (2019-2023)

	2019					2023
Sales	XX	XX	XX	XX	XX	XX
Consumption	XX	XX	XX	XX	XX	XX
Export	XX	XX	XX	XX	XX	XX
Import	XX	XX	XX	XX	XX	XX

Source: Secondary Sources, Customs, Expert Interviews

Figure 35. North America Liquid Runway Deicer Consumption Market Share by Country in 2023

Source: Secondary Sources, Expert Interviews and Research, 2024

5.2.3 U.S.

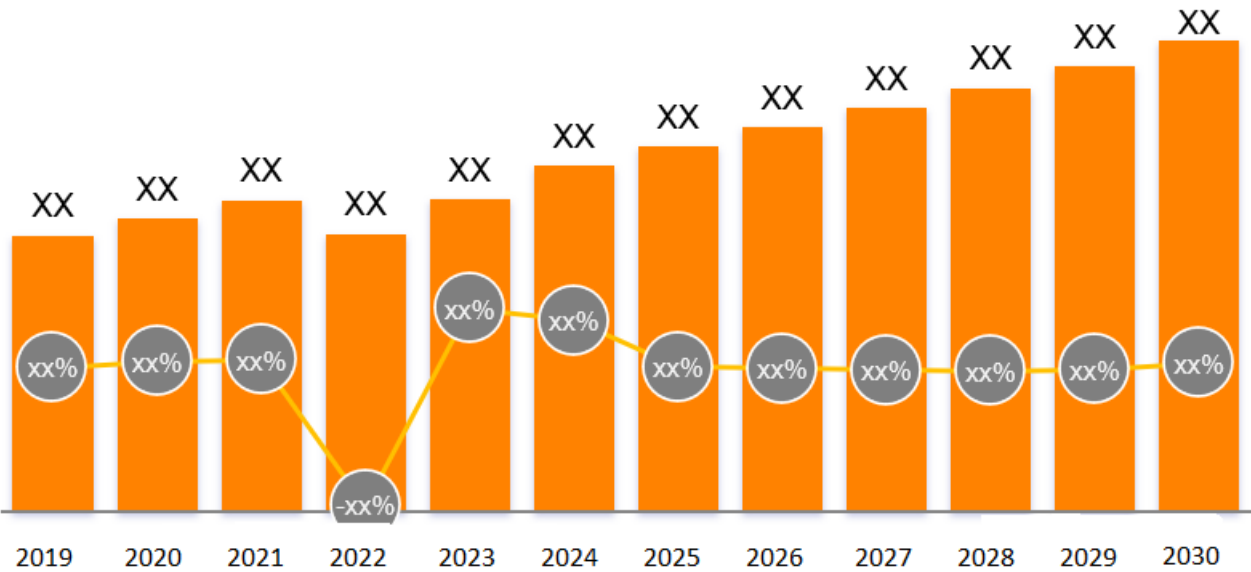
Figure 36. U.S.A Liquid Runway Deicer Consumption and YoY Growth Rate (2019-2024) & (Tons)



Source: Secondary Sources, Expert Interviews and Research, 2024

5.2.4 Canada

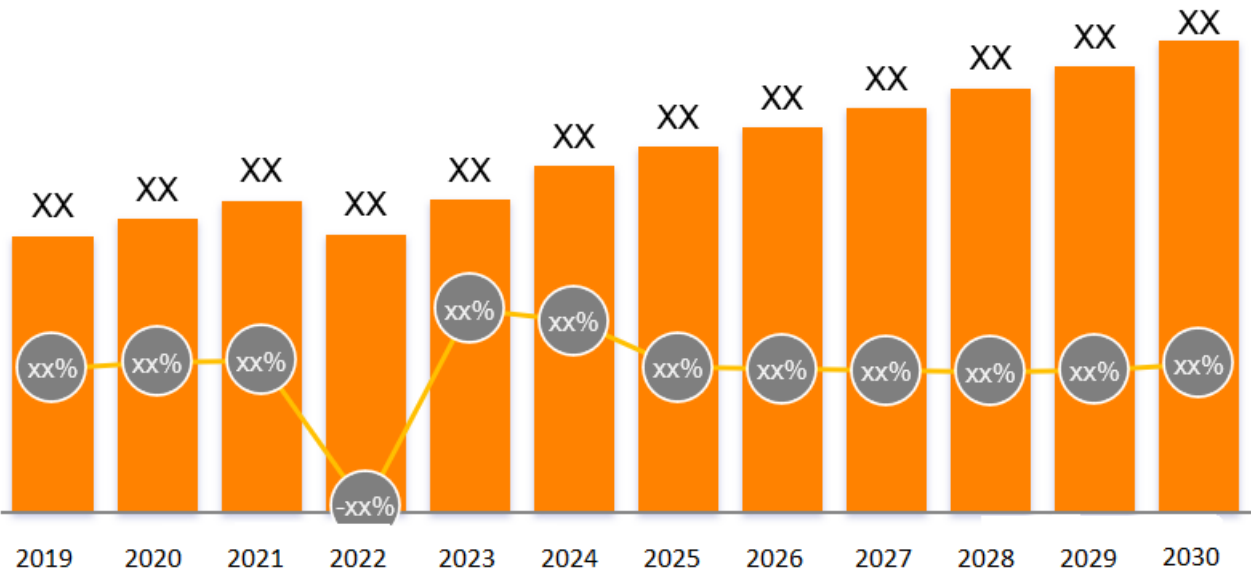
Figure 37. Canada Liquid Runway Deicer Consumption (Tons) and YoY Growth Rate (2019-2024)



Source: Secondary Sources, Expert Interviews and Research, 2024

5.3 Europe

Figure 38. Europe Liquid Runway Deicer Consumption and YoY Growth Rate (2019-2024) & (Tons)



Source: Secondary Sources, Expert Interviews and Research, 2024

5.3.1 Europe Liquid Runway Deicer Consumption by Country

Table 27. Europe Liquid Runway Deicer Consumption by Country (2019-2024) & (Tons)

Europe	2019	2020	2021	2022	2023	2024
Germany	XX	XX	XX	XX	XX	XX
France	XX	XX	XX	XX	XX	XX
U.K.	XX	XX	XX	XX	XX	XX
Italy	XX	XX	XX	XX	XX	XX
Russia	XX	XX	XX	XX	XX	XX
Rest of Europe	XX	XX	XX	XX	XX	XX
Total	XX	XX	XX	XX	XX	XX

Source: Secondary Sources, Expert Interviews and Research, 2024

5.3.2 Europe LIQUID RUNWAY DEICER Sales, Consumption, Export, Import (2019-2023)

Table 28. Europe LIQUID RUNWAY DEICER Sales, Consumption, Export, Import (2019-2023)

	2019					2023
Sales	XX	XX	XX	XX	XX	XX
Consumption	XX	XX	XX	XX	XX	XX
Export	XX	XX	XX	XX	XX	XX
Import	XX	XX	XX	XX	XX	XX

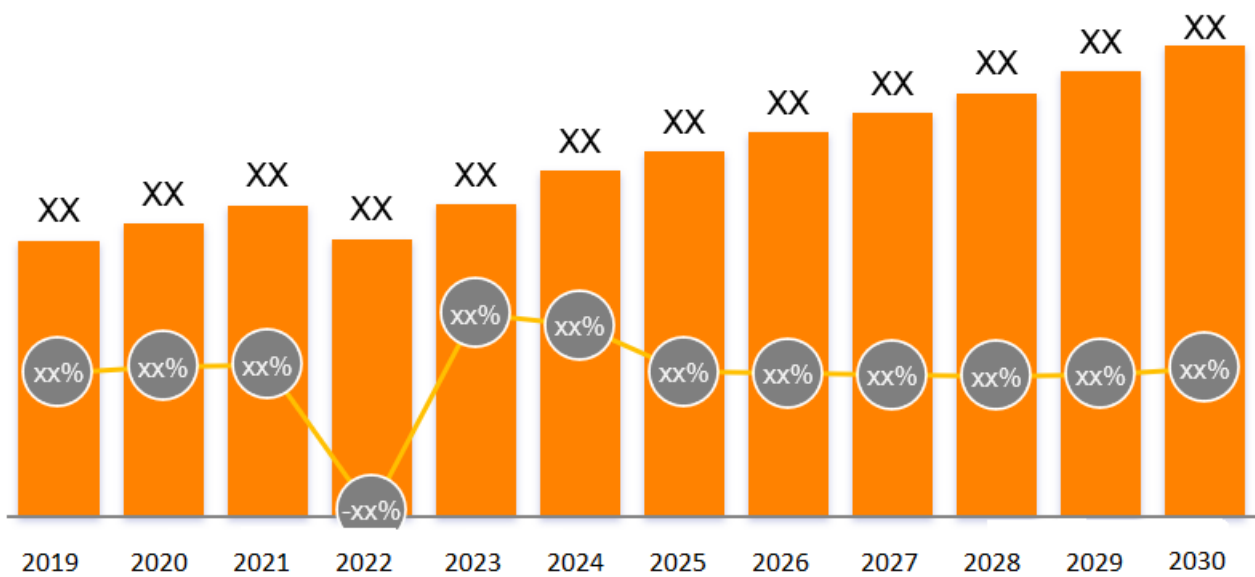
Source: Secondary Sources, Customs, Expert Interview

Figure 39. Europe Liquid Runway Deicer Consumption Market Share by Country in 2023

Source: Secondary Sources, Expert Interviews and Research, 2024

5.3.3 Germany

Figure 40. Germany Liquid Runway Deicer Consumption and YoY Growth Rate (2019-2024) & (Tons)



Source: Secondary Sources, Expert Interviews and Research, 2024

5.3.4 France

Figure 41. France Liquid Runway Deicer Consumption and YoY Growth Rate (2019-2024) & (Tons)

Source: Secondary Sources, Expert Interviews and Research, 2024

5.3.5 U.K.

Figure 42. U.K. Liquid Runway Deicer Consumption and YoY Growth Rate (2019-2024) & (Tons)

Source: Secondary Sources, Expert Interviews and Research, 2024

5.3.6 Italy

Figure 43. Italy Liquid Runway Deicer Consumption and YoY Growth Rate (2019-2024) & (Tons)

Source: Secondary Sources, Expert Interviews and Research, 2024

5.3.7 Russia

Figure 44. Russia Liquid Runway Deicer Consumption and YoY Growth Rate (2019-2024) & (Tons)

Source: Secondary Sources, Expert Interviews and Research, 2024

5.4 Asia Pacific

Figure 45. Asia Pacific Liquid Runway Deicer Consumption and YoY Growth Rate (Tons)

Source: Secondary Sources, Expert Interviews and Research, 2024

5.4.1 Asia Pacific Liquid Runway Deicer Consumption by Region

Table 29. Asia Pacific Liquid Runway Deicer Consumption by Region (2019-2024) & (Tons)

Asia Pacific	2019	2020	2021	2022	2023	2024
China	XX	XX	XX	XX	XX	XX
Japan	XX	XX	XX	XX	XX	XX
South Korea	XX	XX	XX	XX	XX	XX
Taiwan	XX	XX	XX	XX	XX	XX
Southeast Asia	XX	XX	XX	XX	XX	XX
India	XX	XX	XX	XX	XX	XX
Vietnam						
Australia	XX	XX	XX	XX	XX	XX
Rest of Asia Pacific	XX	XX	XX	XX	XX	XX
Total	XX	XX	XX	XX	XX	XX

Source: Secondary Sources, Expert Interviews and Research, 2024

5.4.2 Asia Pacific LIQUID RUNWAY DEICER Sales, Consumption, Export, Import (2019-2023)

Table 30. Asia Pacific LIQUID RUNWAY DEICER Sales, Consumption, Export, Import (2019-2023)

	2019					2023
Sales	XX	XX	XX	XX	XX	XX
Consumption	XX	XX	XX	XX	XX	XX
Export	XX	XX	XX	XX	XX	XX
Import	XX	XX	XX	XX	XX	XX

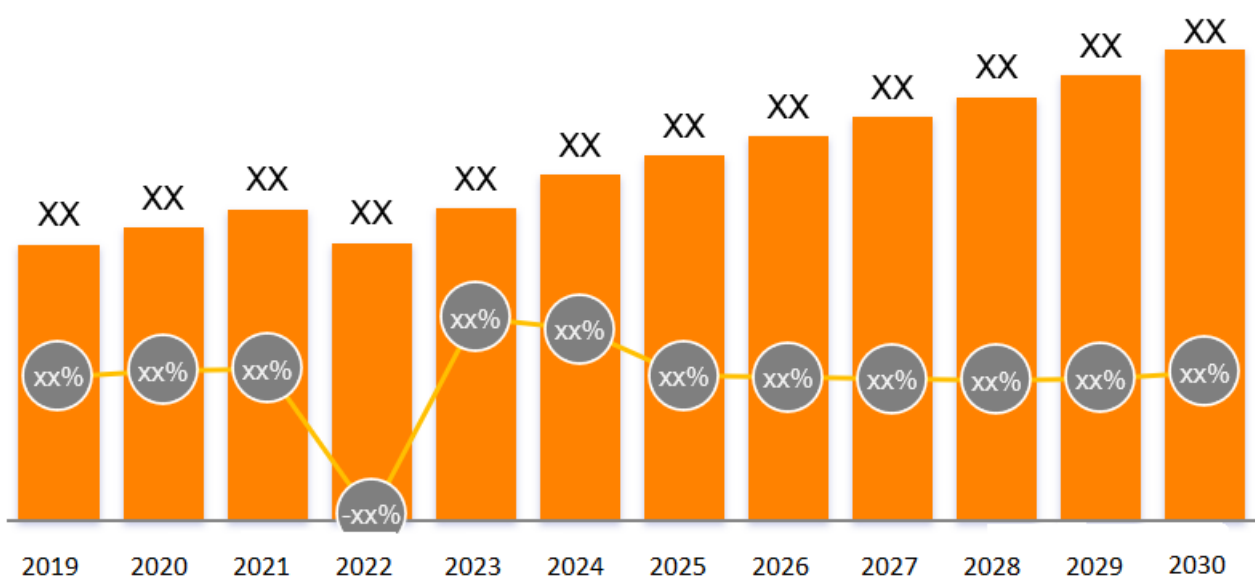
Source: Secondary Sources, Customs, Expert Interview

Figure 46. Asia Pacific Liquid Runway Deicer Consumption Market Share by Region in 2022

Source: Secondary Sources, Expert Interviews and Research, 2024

5.4.3 China

Figure 47. China Liquid Runway Deicer Consumption and YoY Growth Rate (2019-2024) & (Tons)



Source: Secondary Sources, Expert Interviews and Research, 2024

5.4.4 Japan

Figure 48. Japan Liquid Runway Deicer Consumption and YoY Growth Rate (2019-2024) & (Tons)

Source: Secondary Sources, Expert Interviews and Research, 2024

5.4.5 South Korea

Figure 49. South Korea Liquid Runway Deicer Consumption and YoY Growth Rate (2019-2024) & (Tons)

Source: Secondary Sources, Expert Interviews and Research, 2024

5.4.6 Taiwan

Figure 50. Taiwan Liquid Runway Deicer Consumption and YoY Growth Rate (2019-2024) & (Tons)

Source: Secondary Sources, Expert Interviews and Research, 2024

5.4.7 Southeast Asia

Figure 51. Southeast Asia Liquid Runway Deicer Consumption and YoY Growth Rate (2019-2024) & (Tons)

Source: Secondary Sources, Expert Interviews and Research, 2024

5.4.8 India

Figure 52. India Liquid Runway Deicer Consumption and YoY Growth Rate (2019-2024) & (Tons)

Source: Secondary Sources, Expert Interviews and Research, 2024

5.4.9 Vietnam

Figure 53. Vietnam Liquid Runway Deicer Consumption and YoY Growth Rate (2019-2024) & (Tons)

Source: Secondary Sources, Expert Interviews and Research, 2024

5.4.10 Australia

Figure 54. Australia Liquid Runway Deicer Consumption and YoY Growth Rate (2019-2024) & (Tons)

Source: Secondary Sources, Expert Interviews and Research, 2024

5.5 South America

Figure 55. South America Liquid Runway Deicer Consumption and YoY Growth Rate (Tons)

Source: Secondary Sources, Expert Interviews and Research, 2024

5.5.1 South America Liquid Runway Deicer Consumption by Country

Table 31. South America Liquid Runway Deicer Consumption by YoY Country (2019-2024) & (Tons)

South America	2019	2020	2021	2022	2023	2024
Mexico	XX	XX	XX	XX	XX	XX
Brazil	XX	XX	XX	XX	XX	XX
Rest of South America	XX	XX	XX	XX	XX	XX
Total	XX	XX	XX	XX	XX	XX

Source: Secondary Sources, Expert Interviews and Research, 2024

Figure 56. South America Liquid Runway Deicer Consumption Market Share by Country in 2023

Source: Secondary Sources, Expert Interviews and Research, 2024

5.5.2 Mexico

Figure 57. Mexico Liquid Runway Deicer Consumption and YoY Growth Rate (2019-2024) & (Tons)

Source: Secondary Sources, Expert Interviews and Research, 2024

5.5.3 Brazil

Figure 58. Brazil Liquid Runway Deicer Consumption and YoY Growth Rate (2019-2024) & (Tons)

Source: Secondary Sources, Expert Interviews and Research, 2024

5.6 Middle East & Africa

Figure 59. Middle East & Africa Liquid Runway Deicer Consumption and YoY Growth Rate (Tons)

Source: Secondary Sources, Expert Interviews and Research, 2024

5.6.1 Middle East & Africa Liquid Runway Deicer Consumption by Country

Table 32. Middle East & Africa Liquid Runway Deicer Consumption by YoY Country (2019-2024) & (Tons)

South America	2019	2020	2021	2022	2023	2024
Turkey	XX	XX	XX	XX	XX	XX
Israel	XX	XX	XX	XX	XX	XX
Saudi Arabia	XX	XX	XX	XX	XX	XX
UAE						
Rest of Middle East & Africa						
Total	XX	XX	XX	XX	XX	XX

Source: Secondary Sources, Expert Interviews and Research, 2024

Figure 60. Middle East & Africa Liquid Runway Deicer Consumption Market Share by Country in 2023



Source: Secondary Sources, Expert Interviews and Research, 2024

#### 5.6.2 Turkey

##### Figure 61. Turkey Liquid Runway Deicer Consumption and YoY Growth Rate (2019-2024) & (Tons)

Source: Secondary Sources, Expert Interviews and Research, 2024

#### 5.6.3 Israel

##### Figure 62. Israel Liquid Runway Deicer Consumption and YoY Growth Rate (2019-2024) & (Tons)

Source: Secondary Sources, Expert Interviews and Research, 2024

#### 5.6.4 Saudi Arabia

##### Figure 63. Saudi Arabia Liquid Runway Deicer Consumption and YoY Growth Rate (2019-2024) & (Tons)

Source: Secondary Sources, Expert Interviews and Research, 2024

#### 5.6.5 UAE

##### Figure 64. UAE Liquid Runway Deicer Consumption and YoY Growth Rate (2019-2024) & (Tons)

Source: Secondary Sources, Expert Interviews and Research, 2024

#### 5.6.6 Rest of Middle East & Africa

##### Figure 65. Rest of Middle East & Africa Liquid Runway Deicer Consumption and YoY Growth Rate (2019-2024) & (Tons)

Source: Secondary Sources, Expert Interviews and Research, 2024

## 6 Segment by Type

### 6.1 Global Liquid Runway Deicer Production Market Share by Type (2019-2024)

Table 33. Global Liquid Runway Deicer Production (Tons) by Type (2019-2024)

Segment by Type	2019	2020	2021	2022	2023	2024
Alcohol Based Liquid	XX	XX	XX	XX	XX	XX
Sodium Acetate	XX	XX	XX	XX	XX	XX
Potassium Acetate						
Sodium Formate						
Potassium Formate						
Total	XX	XX	XX	XX	XX	XX

Source: Secondary Sources and Research, 2024

Table 34. Global Liquid Runway Deicer Production Market Share by Type (2019-2024)

Segment by Type	2019	2020	2021	2022	2023	2024
Alcohol Based Liquid	XX%	XX%	XX%	XX%	XX%	XX%
Sodium Acetate	XX%	XX%	XX%	XX%	XX%	XX%
Potassium Acetate						
Sodium Formate						
Potassium Formate						
Total	100%	100%	100%	100%	100%	100%

Source: Secondary Sources and Research, 2024

Figure 66. Production Market Share of Liquid Runway Deicer by Type (2019-2024)

Source: Secondary Sources and Research, 2024

Figure 67. Production Market Share of Liquid Runway Deicer by Type in 2023

Source: Secondary Sources and Research, 2024

## 6.2 Global Liquid Runway Deicer Revenue Market Share by Type (2019-2024)

**Table 35. Global Liquid Runway Deicer Revenue (US\$ Million) by Type (2019-2024)**

Segment by Type	2019	2020	2021	2022	2023	2024
Alcohol Based Liquid	XX	XX	XX	XX	XX	XX
Sodium Acetate	XX	XX	XX	XX	XX	XX
Potassium Acetate						
Sodium Formate						
Potassium Formate						
<b>Total</b>	XX	XX	XX	XX	XX	XX

Source: Secondary Sources and Research, 2024

**Table 36. Global Liquid Runway Deicer Revenue Share by Type (2019-2024)**

Source: Secondary Sources and Research, 2024

**Figure 68. Revenue Share of Liquid Runway Deicer by Type (2019-2024)**

Source: Secondary Sources and Research, 2023

**Figure 69. Revenue Market Share of Liquid Runway Deicer by Type in 2023**

Source: Secondary Sources and Research, 2024

## 6.3 Global Liquid Runway Deicer Price by Type (2019-2024)

**Table 37. Global Liquid Runway Deicer Price (US\$/Ton) by Type (2019-2024)**

Segment by Type	2019	2020	2021	2022	2023	2024
Alcohol Based Liquid	XX	XX	XX	XX	XX	XX
Sodium Acetate	XX	XX	XX	XX	XX	XX
Potassium Acetate						
Sodium Formate						
Potassium Formate						

Source: Secondary Sources and Research, 2024

7 Segment by Application

7.1 Global Liquid Runway Deicer Production Market Share by Application (2019-2024)

Table 38. Global Liquid Runway Deicer Production (Tons) by Application (2019-2024)

Segment by Application	2019	2020	2021	2022	2023	2024
Commercial Airports	XX	XX	XX	XX	XX	XX
Military Airfields	XX	XX	XX	XX	XX	XX
General Aviation						
Helipads						
Total	XX	XX	XX	XX	XX	XX

Source: Secondary Sources and Research, 2024

Table 39. Global Liquid Runway Deicer Production Market Share by Application (2019-2024)

Segment by Application	2019	2020	2021	2022	2023	2024
Commercial Airports	XX%	XX%	XX%	XX%	XX%	XX%
Military Airfields	XX%	XX%	XX%	XX%	XX%	XX%
General Aviation						
Helipads						
Total	100%	100%	100%	100%	100%	100%

Source: Secondary Sources and Research, 2024

Figure 70. Production Market Share of Liquid Runway Deicer by Application (2019-2024)

Source: Secondary Sources and Research, 2024

Figure 71. Production Market Share of Liquid Runway Deicer by Application in 2023

Source: Secondary Sources and Research, 2024

## 7.2 Global Liquid Runway Deicer Revenue Market Share by Application (2019-2024)

Table 40. Global Liquid Runway Deicer Revenue (US\$ Million) by Application (2019-2024)

Segment by Application	2019	2020	2021	2022	2023	2024
Commercial Airports	XX	XX	XX	XX	XX	XX
Military Airfields	XX	XX	XX	XX	XX	XX
General Aviation						
Helipads						
Total	XX	XX	XX	XX	XX	XX

Source: Secondary Sources and Research, 2024

Table 41. Global Liquid Runway Deicer Revenue Share by Application (2019-2024)

Source: Secondary Sources and Research, 2024

Figure 72. Revenue Share of Liquid Runway Deicer by Application (2019-2024)

Source: Secondary Sources and Research, 2024

Figure 73. Revenue Market Share of Liquid Runway Deicer by Application in 2023

Source: Secondary Sources and Research, 2024

## 7.3 Global Liquid Runway Deicer Price by Application (2019-2024)

Table 42. Global Liquid Runway Deicer Price (US\$/Ton) by Application (2019-2024)

Segment by Application	2019	2020	2021	2022	2023	2024
Commercial Airports	XX	XX	XX	XX	XX	XX
Military Airfields	XX	XX	XX	XX	XX	XX
General Aviation						
Helipads						

Source: Secondary Sources and Research, 2024

8 Segment by End-Use

8.1 Global Liquid Runway Deicer Production Market Share by End-Use (2019-2024)

Table 43. Global Liquid Runway Deicer Production (Tons) by End-Use (2019-2024)

Segment by End-Use	2019	2020	2021	2022	2023	2024
Airlines	XX	XX	XX	XX	XX	XX
Airport Authorities	XX	XX	XX	XX	XX	XX
Military & Defense Organizations						
General Aviation Operators						
Total	XX	XX	XX	XX	XX	XX

Source: Secondary Sources and Research, 2024

Table 44. Global Liquid Runway Deicer Production Market Share by End-Use (2019-2024)

Segment by End-Use	2019	2020	2021	2022	2023	2024
Airlines	XX%	XX%	XX%	XX%	XX%	XX%
Airport Authorities	XX%	XX%	XX%	XX%	XX%	XX%
Military & Defense Organizations						
General Aviation Operators						
Total	100%	100%	100%	100%	100%	100%

Source: Secondary Sources and Research, 2024

Figure 74. Production Market Share of Liquid Runway Deicer by End-Use (2019-2024)

Source: Secondary Sources and Research, 2024

Figure 75. Production Market Share of Liquid Runway Deicer by End-Use in 2023

Source: Secondary Sources and Research, 2024

## 8.2 Global Liquid Runway Deicer Revenue Market Share by End-Use (2019-2024)

Table 45. Global Liquid Runway Deicer Revenue (US\$ Million) by End-Use (2019-2024)

Segment by End-Use	2019	2020	2021	2022	2023	2024
Airlines	XX	XX	XX	XX	XX	XX
Airport Authorities	XX	XX	XX	XX	XX	XX
Military & Defense Organizations						
General Aviation Operators						
Total	XX	XX	XX	XX	XX	XX

Source: Secondary Sources and Research, 2024

Table 46. Global Liquid Runway Deicer Revenue Share by End-Use (2019-2024)

Source: Secondary Sources and Research, 2024

Figure 76. Revenue Share of Liquid Runway Deicer by End-Use (2019-2024)

Source: Secondary Sources and Research, 2024

Figure 77. Revenue Market Share of Liquid Runway Deicer by End-Use in 2023

Source: Secondary Sources and Research, 2024

## 8.3 Global Liquid Runway Deicer Price by End-Use (2019-2024)

Table 47. Global Liquid Runway Deicer Price (US\$/Ton) by End-Use (2019-2024)

Segment by End-Use	2019	2020	2021	2022	2023	2024
Airlines	XX	XX	XX	XX	XX	XX
Airport Authorities	XX	XX	XX	XX	XX	XX
Military & Defense Organizations						
General Aviation Operators						

Source: Secondary Sources and Research, 2024





## 9 Key Companies Profiled

This chapter is to strategically profile the key players, to present the details of Liquid Runway Deicer product, and to show the key data of each company in Liquid Runway Deicer business.

### 9.1 Cryotech



#### 9.1.1 Cryotech Liquid Runway Deicer Corporation Information

Table 48. Cryotech Liquid Runway Deicer Corporation Information

#	Item	Description
1	Company Name	Cryotech
2	Website	
3	Headquarters	
4	Manufacturing Locations	
5	Area Served	
6	Commercial Date	
7	Market Position or History	
8	Contact Information	

Source: Cryotech; Secondary Sources, Press Releases, Expert Interviews and Research, 2024

#### 9.1.2 Cryotech Liquid Runway Deicer Product Portfolio

Table 49. Cryotech Liquid Runway Deicer Specification and Application

Type	Description

Source: Cryotech; Secondary Sources, Press Releases, Expert Interviews and Research, 2024

9.1.3 Cryotech Liquid Runway Deicer Production Capacity, Revenue, Price and Gross Margin (2019-2024)

Table 50. Cryotech Liquid Runway Deicer Production (Tons), Revenue (US\$ Million), Price (US\$/Ton), Ex-Factory Price (\$/Volume), Capacity (Volume), Cost (\$/Volume) and Gross Margin (2019-2024)

Cryotech	2019	2020	2021	2022	2023	2024
Capacity (Volume)	XX	XX	XX	XX	XX	XX
Production (Volume)	XX	XX	XX	XX	XX	XX
Capacity Utilization Rate	XX%	XX%	XX%	XX%	XX%	XX%
Ex-Factory Price (\$/Volume)	XX	XX	XX	XX	XX	XX
Revenue (\$)	XX	XX	XX	XX	XX	XX
Cost (\$/Volume)	XX	XX	XX	XX	XX	XX
Gross (\$/Volume)	XX	XX	XX	XX	XX	XX
Gross Margin	XX%	XX%	XX%	XX%	XX%	XX%

Source: Cryotech; Secondary Sources, Press Releases, Expert Interviews and Research, 2024

9.1.4 Cryotech Main Business and Markets Served

Table 51. Cryotech Main Business and Markets Served

Main Business	Description

Source: Cryotech; Research, 2024

9.1.5 Cryotech Recent Developments/Updates

Table 52. Cryotech Recent Developments/Updates

Date	Description

Source: Cryotech; Secondary Sources, Expert Interviews and Research, 2024

9.2 Proviron



9.2.1 Proviron Liquid Runway Deicer Corporation Information

Table 53. Proviron Liquid Runway Deicer Corporation Information

#	Item	Description
1	Company Name	Proviron
2	Website	
3	Headquarters	
4	Manufacturing Locations	
5	Area Served	
6	Commercial Date	
7	Market Position or History	
8	Contact Information	

Source: Proviron; Secondary Sources, Press Releases, Expert Interviews and Research, 2024

9.2.2 Proviron Liquid Runway Deicer Product Portfolio

Table 54. Proviron Liquid Runway Deicer Specification and Application

Type	Description

Source: Proviron; Secondary Sources, Press Releases, Expert Interviews and Research, 2024

### 9.2.3 Proviron Liquid Runway Deicer Production Capacity, Revenue, Price and Gross Margin (2019-2024)

**Table 55. Proviron Liquid Runway Deicer Production (Tons), Revenue (US\$ Million), Price (US\$/Ton), Ex-Factory Price (\$/Volume), Capacity (Volume), Cost (\$/Volume) and Gross Margin (2019-2024)**

Proviron	2019	2020	2021	2022	2023	2024
Capacity (Volume)	XX	XX	XX	XX	XX	XX
Production (Volume)	XX	XX	XX	XX	XX	XX
Capacity Utilization Rate	XX%	XX%	XX%	XX%	XX%	XX%
Ex-Factory Price (\$/Volume)	XX	XX	XX	XX	XX	XX
Revenue (\$)	XX	XX	XX	XX	XX	XX
Cost (\$/Volume)	XX	XX	XX	XX	XX	XX
Gross (\$/Volume)	XX	XX	XX	XX	XX	XX
Gross Margin	XX%	XX%	XX%	XX%	XX%	XX%

Source: Proviron; Secondary Sources, Press Releases, Expert Interviews and Research, 2024

### 9.2.4 Proviron Main Business and Markets Served

**Table 56. Proviron Main Business and Markets Served**

Main Business	Description

Source: Proviron; Research, 2024

### 9.2.5 Proviron Recent Developments/Updates

**Table 57. Proviron Recent Developments/Updates**

Date	Description

Source: Proviron; Secondary Sources, Expert Interviews and Research, 2024

9.3 Perstorp



9.3.1 Perstorp Liquid Runway Deicer Corporation Information

Table 58. Perstorp Liquid Runway Deicer Corporation Information

#	Item	Description
1	Company Name	Perstorp
2	Website	
3	Headquarters	
4	Manufacturing Locations	
5	Area Served	
6	Commercial Date	
7	Market Position or History	
8	Contact Information	

Source: Perstorp; Secondary Sources, Press Releases, Expert Interviews and Research, 2024

9.3.2 Perstorp Liquid Runway Deicer Product Portfolio

Table 59. Perstorp Liquid Runway Deicer Specification and Application

Type	Description

Source: Perstorp; Secondary Sources, Press Releases, Expert Interviews and Research, 2024

9.3.3 Perstorp Liquid Runway Deicer Production Capacity, Revenue, Price and Gross Margin (2019-2024)

Table 60. Perstorp Liquid Runway Deicer Production (Tons), Revenue (US\$ Million), Price (US\$/Ton), Ex-Factory Price (\$/Volume), Capacity (Volume), Cost (\$/Volume) and Gross Margin (2019-2024)

Perstorp	2019	2020	2021	2022	2023	2024
Capacity (Volume)	XX	XX	XX	XX	XX	XX
Production (Volume)	XX	XX	XX	XX	XX	XX

Capacity Utilization Rate	XX%	XX%	XX%	XX%	XX%	XX%
Ex-Factory Price (\$/Volume)	XX	XX	XX	XX	XX	XX
Revenue (\$)	XX	XX	XX	XX	XX	XX
Cost (\$/Volume)	XX	XX	XX	XX	XX	XX
Gross (\$/Volume)	XX	XX	XX	XX	XX	XX
Gross Margin	XX%	XX%	XX%	XX%	XX%	XX%

Source: Perstorp; Secondary Sources, Press Releases, Expert Interviews and Research, 2024

9.3.4 Perstorp Main Business and Markets Served

Table 61. Perstorp Main Business and Markets Served

Main Business	Description

Source: Perstorp; Research, 2024

9.3.5 Perstorp Recent Developments/Updates

Table 62. Perstorp Recent Developments/Updates

Date	Description

Source: Perstorp; Secondary Sources, Expert Interviews and Research, 2024

9.4 Clariant

9.4.1 Clariant Liquid Runway Deicer Corporation Information

Table 63. Clariant Liquid Runway Deicer Corporation Information

#	Item	Description
1	Company Name	Clariant
2	Website	
3	Headquarters	
4	Manufacturing Locations	
5	Area Served	

6	Commercial Date
7	Market Position or History
8	Contact Information

Source: Clariant; Secondary Sources, Press Releases, Expert Interviews and Research, 2024

9.4.2 Clariant Liquid Runway Deicer Product Portfolio

Table 64. Clariant Liquid Runway Deicer Specification and Application

Type	Description

Source: Clariant; Secondary Sources, Press Releases, Expert Interviews and Research, 2024

9.4.3 Clariant Liquid Runway Deicer Production Capacity, Revenue, Price and Gross Margin (2019-2024)

Table 65. Clariant Liquid Runway Deicer Production (Tons), Revenue (US\$ Million), Price (US\$/Ton), Ex-Factory Price (\$/Volume), Capacity (Volume), Cost (\$/Volume) and Gross Margin (2019-2024)

Clariant	2019	2020	2021	2022	2023	2024
Capacity (Volume)	XX	XX	XX	XX	XX	XX
Production (Volume)	XX	XX	XX	XX	XX	XX
Capacity Utilization Rate	XX%	XX%	XX%	XX%	XX%	XX%
Ex-Factory Price (\$/Volume)	XX	XX	XX	XX	XX	XX
Revenue (\$)	XX	XX	XX	XX	XX	XX
Cost (\$/Volume)	XX	XX	XX	XX	XX	XX
Gross (\$/Volume)	XX	XX	XX	XX	XX	XX
Gross Margin	XX%	XX%	XX%	XX%	XX%	XX%

Source: Clariant; Secondary Sources, Press Releases, Expert Interviews and Research, 2024

9.4.4 Clariant Main Business and Markets Served

Table 66. Clariant Main Business and Markets Served

Main Business	Description

Source: Clariant; Research, 2024

9.4.5 Clariant Recent Developments/Updates

Table 67. Clariant Recent Developments/Updates

Date	Description

Source: Clariant; Secondary Sources, Expert Interviews and Research, 2024

9.5 LNT Group

9.5.1 LNT Group Liquid Runway Deicer Corporation Information

Table 68. LNT Group Liquid Runway Deicer Corporation Information

#	Item	Description
1	Company Name	LNT Group
2	Website	
3	Headquarters	
4	Manufacturing Locations	
5	Area Served	
6	Commercial Date	
7	Market Position or History	
8	Contact Information	

Source: LNT Group; Secondary Sources, Press Releases, Expert Interviews and Research, 2024

9.5.2 LNT Group Liquid Runway Deicer Product Portfolio

Table 69. LNT Group Liquid Runway Deicer Specification and Application

Type	Description

Source: LNT Group; Secondary Sources, Press Releases, Expert Interviews and Research, 2024



9.5.3 LNT Group Liquid Runway Deicer Production Capacity, Revenue, Price and Gross Margin (2019-2024)

Table 70. LNT Group Liquid Runway Deicer Production (Tons), Revenue (US\$ Million), Price (US\$/Ton), Ex-Factory Price (\$/Volume), Capacity (Volume), Cost (\$/Volume) and Gross Margin (2019-2024)

LNT Group	2019	2020	2021	2022	2023	2024
Capacity (Volume)	XX	XX	XX	XX	XX	XX
Production (Volume)	XX	XX	XX	XX	XX	XX
Capacity Utilization Rate	XX%	XX%	XX%	XX%	XX%	XX%
Ex-Factory Price (\$/Volume)	XX	XX	XX	XX	XX	XX
Revenue (\$)	XX	XX	XX	XX	XX	XX
Cost (\$/Volume)	XX	XX	XX	XX	XX	XX
Gross (\$/Volume)	XX	XX	XX	XX	XX	XX
Gross Margin	XX%	XX%	XX%	XX%	XX%	XX%

Source: LNT Group; Secondary Sources, Press Releases, Expert Interviews and Research, 2024

9.5.4 LNT Group Main Business and Markets Served

Table 71. LNT Group Main Business and Markets Served

Main Business	Description

Source: LNT Group; Research, 2024

9.5.5 LNT Group Recent Developments/Updates

Table 72. LNT Group Recent Developments/Updates

Date	Description

Source: LNT Group; Secondary Sources, Expert Interviews and Research, 2024

## 9.6 TR Bonnyman Son & Company

### 9.6.1 TR Bonnyman Son & Company Liquid Runway Deicer Corporation Information

**Table 73. TR Bonnyman Son & Company Liquid Runway Deicer Corporation Information**

#	Item	Description
1	Company Name	TR Bonnyman Son & Company
2	Website	
3	Headquarters	
4	Manufacturing Locations	
5	Area Served	
6	Commercial Date	
7	Market Position or History	
8	Contact Information	

Source: TR Bonnyman Son & Company; Secondary Sources, Press Releases, Expert Interviews and Research, 2024

### 9.6.2 TR Bonnyman Son & Company Liquid Runway Deicer Product Portfolio

**Table 74. TR Bonnyman Son & Company Liquid Runway Deicer Specification and Application**

Type	Description

Source: TR Bonnyman Son & Company; Secondary Sources, Press Releases, Expert Interviews and Research, 2024

### 9.6.3 TR Bonnyman Son & Company Liquid Runway Deicer Production Capacity, Revenue, Price and Gross Margin (2019-2024)

**Table 75. TR Bonnyman Son & Company Liquid Runway Deicer Production (Tons), Revenue (US\$ Million), Price (US\$/Ton), Ex-Factory Price (\$/Volume), Capacity (Volume), Cost (\$/Volume) and Gross Margin (2019-2024)**

TR Bonnyman Son & Company	2019	2020	2021	2022	2023	2024
Capacity (Volume)	XX	XX	XX	XX	XX	XX
Production (Volume)	XX	XX	XX	XX	XX	XX
Capacity Utilization Rate	XX%	XX%	XX%	XX%	XX%	XX%
Ex-Factory Price (\$/Volume)	XX	XX	XX	XX	XX	XX
Revenue (\$)	XX	XX	XX	XX	XX	XX
Cost (\$/Volume)	XX	XX	XX	XX	XX	XX
Gross (\$/Volume)	XX	XX	XX	XX	XX	XX

Gross Margin	XX%	XX%	XX%	XX%	XX%	XX%
--------------	-----	-----	-----	-----	-----	-----

Source: TR Bonnyman Son & Company; Secondary Sources, Press Releases, Expert Interviews and Research, 2024

9.6.4 TR Bonnyman Son & Company Main Business and Markets Served

Table 76. TR Bonnyman Son & Company Main Business and Markets Served

Main Business	Description

Source: TR Bonnyman Son & Company; Research, 2024

9.6.5 TR Bonnyman Son & Company Recent Developments/Updates

Table 77. TR Bonnyman Son & Company Recent Developments/Updates

Date	Description

Source: TR Bonnyman Son & Company; Secondary Sources, Expert Interviews and Research, 2024

9.7 KILFROST

9.7.1 KILFROST Liquid Runway Deicer Corporation Information

Table 78. KILFROST Liquid Runway Deicer Corporation Information

#	Item	Description
1	Company Name	KILFROST
2	Website	
3	Headquarters	
4	Manufacturing Locations	
5	Area Served	
6	Commercial Date	
7	Market Position or History	
8	Contact Information	

Source: KILFROST; Secondary Sources, Press Releases, Expert Interviews and Research, 2024

### 9.7.2 Kilfrost Liquid Runway Deicer Production Capacity, Revenue, Price and Gross Margin (2019-2024)

**Table 79. Kilfrost Liquid Runway Deicer Production (Tons), Revenue (US\$ Million), Price (US\$/Ton), Ex-Factory Price (\$/Volume), Capacity (Volume), Cost (\$/Volume) and Gross Margin (2019-2024)**

Kilfrost	2019	2020	2021	2022	2023	2024
Capacity (Volume)	XX	XX	XX	XX	XX	XX
Production (Volume)	XX	XX	XX	XX	XX	XX
Capacity Utilization Rate	XX%	XX%	XX%	XX%	XX%	XX%
Ex-Factory Price (\$/Volume)	XX	XX	XX	XX	XX	XX
Revenue (\$)	XX	XX	XX	XX	XX	XX
Cost (\$/Volume)	XX	XX	XX	XX	XX	XX
Gross (\$/Volume)	XX	XX	XX	XX	XX	XX
Gross Margin	XX%	XX%	XX%	XX%	XX%	XX%

Source: Kilfrost; Secondary Sources, Press Releases, Expert Interviews and Research, 2024

### 9.7.3 KILFROST Main Business and Markets Served

**Table 80. KILFROST Main Business and Markets Served**

Main Business	Description

Source: KILFROST; Research, 2024

### 9.7.4 KILFROST Recent Developments/Updates

**Table 81. KILFROST Recent Developments/Updates**

Date	Description

Source: KILFROST; Secondary Sources, Expert Interviews and Research, 2024

## 9.8 Harmony Deicing

### 9.8.1 Harmony Deicing Liquid Runway Deicer Corporation Information

**Table 82. Harmony Deicing Liquid Runway Deicer Corporation Information**

#	Item	Description
1	Company Name	Harmony Deicing
2	Website	
3	Headquarters	
4	Manufacturing Locations	
5	Area Served	
6	Commercial Date	
7	Market Position or History	
8	Contact Information	

Source: Harmony Deicing; Secondary Sources, Press Releases, Expert Interviews and Research, 2024

### 9.8.2 Harmony Deicing Liquid Runway Deicer Product Portfolio

**Table 83. Harmony Deicing Liquid Runway Deicer Specification and Application**

Type	Description

Source: Harmony Deicing; Secondary Sources, Press Releases, Expert Interviews and Research, 2024

### 9.8.3 Harmony Deicing Liquid Runway Deicer Production Capacity, Revenue, Price and Gross Margin (2019-2024)

**Table 84. Harmony Deicing Liquid Runway Deicer Production (Tons), Revenue (US\$ Million), Price (US\$/Ton), Ex-Factory Price (\$/Volume), Capacity (Volume), Cost (\$/Volume) and Gross Margin (2019-2024)**

Harmony Deicing	2019	2020	2021	2022	2023	2024
Capacity (Volume)	XX	XX	XX	XX	XX	XX
Production (Volume)	XX	XX	XX	XX	XX	XX
Capacity Utilization Rate	XX%	XX%	XX%	XX%	XX%	XX%
Ex-Factory Price (\$/Volume)	XX	XX	XX	XX	XX	XX
Revenue (\$)	XX	XX	XX	XX	XX	XX
Cost (\$/Volume)	XX	XX	XX	XX	XX	XX
Gross (\$/Volume)	XX	XX	XX	XX	XX	XX

Gross Margin	XX%	XX%	XX%	XX%	XX%	XX%
--------------	-----	-----	-----	-----	-----	-----

Source: Harmony Deicing; Secondary Sources, Press Releases, Expert Interviews and Research, 2024

9.8.4 Harmony Deicing Main Business and Markets Served

Table 85. Harmony Deicing Main Business and Markets Served

Main Business	Description

Source: Harmony Deicing; Research, 2024

9.8.5 Harmony Deicing Recent Developments/Updates

Table 86. Harmony Deicing Recent Developments/Updates

Date	Description

Source: Harmony Deicing; Secondary Sources, Expert Interviews and Research, 2024

9.9 Esseco

9.9.1 Esseco Liquid Runway Deicer Corporation Information

Table 87. Esseco Liquid Runway Deicer Corporation Information

#	Item	Description
1	Company Name	Esseco
2	Website	
3	Headquarters	
4	Manufacturing Locations	
5	Area Served	
6	Commercial Date	
7	Market Position or History	
8	Contact Information	

Source: Esseco; Secondary Sources, Press Releases, Expert Interviews and Research, 2024

### 9.9.2 Esseco Liquid Runway Deicer Product Portfolio

**Table 88. Esseco Liquid Runway Deicer Specification and Application**

Type	Description

Source: Esseco; Secondary Sources, Press Releases, Expert Interviews and Research, 2024

### 9.9.3 Esseco Liquid Runway Deicer Production Capacity, Revenue, Price and Gross Margin (2019-2024)

**Table 89. Esseco Liquid Runway Deicer Production (Tons), Revenue (US\$ Million), Price (US\$/Ton), Ex-Factory Price (\$/Volume), Capacity (Volume), Cost (\$/Volume) and Gross Margin (2019-2024)**

Esseco	2019	2020	2021	2022	2023	2024
Capacity (Volume)	XX	XX	XX	XX	XX	XX
Production (Volume)	XX	XX	XX	XX	XX	XX
Capacity Utilization Rate	XX%	XX%	XX%	XX%	XX%	XX%
Ex-Factory Price (\$/Volume)	XX	XX	XX	XX	XX	XX
Revenue (\$)	XX	XX	XX	XX	XX	XX
Cost (\$/Volume)	XX	XX	XX	XX	XX	XX
Gross (\$/Volume)	XX	XX	XX	XX	XX	XX
Gross Margin	XX%	XX%	XX%	XX%	XX%	XX%

Source: Esseco; Secondary Sources, Press Releases, Expert Interviews and Research, 2024

### 9.9.4 Esseco Main Business and Markets Served

**Table 90. Esseco Main Business and Markets Served**

Main Business	Description

Source: Esseco; Research, 2024

### 9.9.5 Esseco Recent Developments/Updates

**Table 91. Esseco Recent Developments/Updates**

Date	Description

Source: Esseco; Secondary Sources, Expert Interviews and Research, 2024

9.10 Seneca

9.10.1 Seneca Liquid Runway Deicer Corporation Information

Table 92. Seneca Liquid Runway Deicer Corporation Information

#	Item	Description
1	Company Name	Seneca
2	Website	
3	Headquarters	
4	Manufacturing Locations	
5	Area Served	
6	Commercial Date	
7	Market Position or History	
8	Contact Information	

Source: Seneca; Secondary Sources, Press Releases, Expert Interviews and Research, 2024

9.10.2 Seneca Liquid Runway Deicer Product Portfolio

Table 93. Seneca Liquid Runway Deicer Specification and Application

Type	Description

Source: Seneca; Secondary Sources, Press Releases, Expert Interviews and Research, 2024

9.10.3 Seneca Liquid Runway Deicer Production Capacity, Revenue, Price and Gross Margin (2019-2024)

Table 94. Seneca Liquid Runway Deicer Production (Tons), Revenue (US\$ Million), Price (US\$/Ton), Ex-Factory Price (\$/Volume), Capacity (Volume), Cost (\$/Volume) and Gross Margin (2019-2024)

Seneca	2019	2020	2021	2022	2023	2024
Capacity (Volume)	XX	XX	XX	XX	XX	XX



Production (Volume)	XX	XX	XX	XX	XX	XX
Capacity Utilization Rate	XX%	XX%	XX%	XX%	XX%	XX%
Ex-Factory Price (\$/Volume)	XX	XX	XX	XX	XX	XX
Revenue (\$)	XX	XX	XX	XX	XX	XX
Cost (\$/Volume)	XX	XX	XX	XX	XX	XX
Gross (\$/Volume)	XX	XX	XX	XX	XX	XX
Gross Margin	XX%	XX%	XX%	XX%	XX%	XX%

Source: Seneca; Secondary Sources, Press Releases, Expert Interviews and Research, 2024

9.10.4 Seneca Main Business and Markets Served

Table 95. Seneca Main Business and Markets Served

Main Business	Description

Source: Seneca; Research, 2024

9.10.5 Seneca Recent Developments/Updates

Table 96. Seneca Recent Developments/Updates

Date	Description

Source: Seneca; Secondary Sources, Expert Interviews and Research, 2024

9.11 OMEX

9.11.1 OMEX Liquid Runway Deicer Corporation Information

Table 97. OMEX Liquid Runway Deicer Corporation Information

#	Item	Description
1	Company Name	OMEX
2	Website	
3	Headquarters	
4	Manufacturing Locations	

5 Area Served

6 Commercial Date

7 Market Position or History

8 Contact Information

Source: OMEX; Secondary Sources, Press Releases, Expert Interviews and Research, 2024

### 9.11.2 OMEX Liquid Runway Deicer Production Capacity, Revenue, Price and Gross Margin (2019-2024)

**Table 98. OMEX Liquid Runway Deicer Production (Tons), Revenue (US\$ Million), Price (US\$/Ton), Ex-Factory Price (\$/Volume), Capacity (Volume), Cost (\$/Volume) and Gross Margin (2019-2024)**

OMEX	2019	2020	2021	2022	2023	2024
Capacity (Volume)	XX	XX	XX	XX	XX	XX
Production (Volume)	XX	XX	XX	XX	XX	XX
Capacity Utilization Rate	XX%	XX%	XX%	XX%	XX%	XX%
Ex-Factory Price (\$/Volume)	XX	XX	XX	XX	XX	XX
Revenue (\$)	XX	XX	XX	XX	XX	XX
Cost (\$/Volume)	XX	XX	XX	XX	XX	XX
Gross (\$/Volume)	XX	XX	XX	XX	XX	XX
Gross Margin	XX%	XX%	XX%	XX%	XX%	XX%

Source: OMEX; Secondary Sources, Press Releases, Expert Interviews and Research, 2024

### 9.11.3 OMEX Main Business and Markets Served

**Table 99. OMEX Main Business and Markets Served**

Main Business	Description

Source: OMEX; Research, 2024

### 9.11.4 OMEX Recent Developments/Updates

**Table 100. OMEX Recent Developments/Updates**

Date	Description

Source: OMEX; Secondary Sources, Expert Interviews and Research, 2024

9.12 Pelican Chemicals

9.12.1 Pelican Chemicals Liquid Runway Deicer Corporation Information

Table 101. Pelican Chemicals Liquid Runway Deicer Corporation Information

#	Item	Description
1	Company Name	Pelican Chemicals
2	Website	
3	Headquarters	
4	Manufacturing Locations	
5	Area Served	
6	Commercial Date	
7	Market Position or History	
8	Contact Information	

Source: Pelican Chemicals; Secondary Sources, Press Releases, Expert Interviews and Research, 2024

9.12.2 Pelican Chemicals Liquid Runway Deicer Product Portfolio

Table 102. Pelican Chemicals Liquid Runway Deicer Specification and Application

Type	Description

Source: Pelican Chemicals; Secondary Sources, Press Releases, Expert Interviews and Research, 2024

9.12.3 Pelican Chemicals Liquid Runway Deicer Production Capacity, Revenue, Price and Gross Margin (2019-2024)

Table 103. Pelican Chemicals Liquid Runway Deicer Production (Tons), Revenue (US\$ Million), Price (US\$/Ton), Ex-Factory Price (\$/Volume), Capacity (Volume), Cost (\$/Volume) and Gross Margin (2019-2024)

Pelican Chemicals	2019	2020	2021	2022	2023	2024
Capacity (Volume)	XX	XX	XX	XX	XX	XX
Production (Volume)	XX	XX	XX	XX	XX	XX
Capacity Utilization Rate	XX%	XX%	XX%	XX%	XX%	XX%
Ex-Factory Price (\$/Volume)	XX	XX	XX	XX	XX	XX

Revenue (\$)	XX	XX	XX	XX	XX	XX
Cost (\$/Volume)	XX	XX	XX	XX	XX	XX
Gross (\$/Volume)	XX	XX	XX	XX	XX	XX
Gross Margin	XX%	XX%	XX%	XX%	XX%	XX%

Source: Pelican Chemicals; Secondary Sources, Press Releases, Expert Interviews and Research, 2024

9.12.4 Pelican Chemicals Main Business and Markets Served

Table 104. Pelican Chemicals Main Business and Markets Served

Main Business	Description

Source: Pelican Chemicals; Research, 2024

9.12.5 Pelican Chemicals Recent Developments/Updates

Table 105. Pelican Chemicals Recent Developments/Updates

Date	Description

Source: Pelican Chemicals; Secondary Sources, Expert Interviews and Research, 2024

9.13 UltraBlue

9.13.1 UltraBlue Liquid Runway Deicer Corporation Information

Table 106. UltraBlue Liquid Runway Deicer Corporation Information

#	Item	Description
1	Company Name	UltraBlue
2	Website	
3	Headquarters	
4	Manufacturing Locations	
5	Area Served	
6	Commercial Date	
7	Market Position or History	

8 Contact Information

Source: UltraBlue; Secondary Sources, Press Releases, Expert Interviews and Research, 2024

9.13.2 UltraBlue Liquid Runway Deicer Product Portfolio

Table 107. UltraBlue Liquid Runway Deicer Specification and Application

Type	Description

Source: UltraBlue; Secondary Sources, Press Releases, Expert Interviews and Research, 2024

9.13.3 UltraBlue Liquid Runway Deicer Production Capacity, Revenue, Price and Gross Margin (2019-2024)

Table 108. UltraBlue Liquid Runway Deicer Production (Tons), Revenue (US\$ Million), Price (US\$/Ton), Ex-Factory Price (\$/Volume), Capacity (Volume), Cost (\$/Volume) and Gross Margin (2019-2024)

UltraBlue	2019	2020	2021	2022	2023	2024
Capacity (Volume)	XX	XX	XX	XX	XX	XX
Production (Volume)	XX	XX	XX	XX	XX	XX
Capacity Utilization Rate	XX%	XX%	XX%	XX%	XX%	XX%
Ex-Factory Price (\$/Volume)	XX	XX	XX	XX	XX	XX
Revenue (\$)	XX	XX	XX	XX	XX	XX
Cost (\$/Volume)	XX	XX	XX	XX	XX	XX
Gross (\$/Volume)	XX	XX	XX	XX	XX	XX
Gross Margin	XX%	XX%	XX%	XX%	XX%	XX%

Source: UltraBlue; Secondary Sources, Press Releases, Expert Interviews and Research, 2024

9.13.4 UltraBlue Main Business and Markets Served

Table 109. UltraBlue Main Business and Markets Served

Main Business	Description

Source: UltraBlue; Research, 2024

9.13.5 UltraBlue Recent Developments/Updates

Table 110. UltraBlue Recent Developments/Updates

Date	Description

Source: UltraBlue; Secondary Sources, Expert Interviews and Research, 2024

9.14 Boschung

9.14.1 Boschung Liquid Runway Deicer Corporation Information

Table 111. Boschung Liquid Runway Deicer Corporation Information

#	Item	Description
1	Company Name	Boschung
2	Website	
3	Headquarters	
4	Manufacturing Locations	
5	Area Served	
6	Commercial Date	
7	Market Position or History	
8	Contact Information	

Source: Boschung; Secondary Sources, Press Releases, Expert Interviews and Research, 2024

9.14.2 Boschung Liquid Runway Deicer Product Portfolio

Table 112. Boschung Liquid Runway Deicer Specification and Application

Type	Description

Source: Boschung; Secondary Sources, Press Releases, Expert Interviews and Research, 2024

9.14.3 Boschung Liquid Runway Deicer Production Capacity, Revenue, Price and Gross Margin (2019-2024)

Table 113. Boschung Liquid Runway Deicer Production (Tons), Revenue (US\$ Million), Price (US\$/Ton), Ex-Factory Price (\$/Volume), Capacity (Volume), Cost (\$/Volume) and Gross Margin (2019-2024)

Boschung	2019	2020	2021	2022	2023	2024
Capacity (Volume)	XX	XX	XX	XX	XX	XX
Production (Volume)	XX	XX	XX	XX	XX	XX
Capacity Utilization Rate	XX%	XX%	XX%	XX%	XX%	XX%
Ex-Factory Price (\$/Volume)	XX	XX	XX	XX	XX	XX
Revenue (\$)	XX	XX	XX	XX	XX	XX
Cost (\$/Volume)	XX	XX	XX	XX	XX	XX
Gross (\$/Volume)	XX	XX	XX	XX	XX	XX
Gross Margin	XX%	XX%	XX%	XX%	XX%	XX%

Source: Boschung; Secondary Sources, Press Releases, Expert Interviews and Research, 2024

9.14.4 Boschung Main Business and Markets Served

Table 114. Boschung Main Business and Markets Served

Main Business	Description

Source: Boschung; Research, 2024

9.14.5 Boschung Recent Developments/Updates

Table 115. Boschung Recent Developments/Updates

Date	Description

Source: Boschung; Secondary Sources, Expert Interviews and Research, 2024

## 10 Liquid Runway Deicer Manufacturing Cost Analysis

### 10.1 Liquid Runway Deicer Key Raw Materials Analysis

#### 10.1.1 Key Raw Materials

Table 116. Production Base and Market Concentration Rate of Raw Material

Raw Materials	Market Concentration Rate
Raw Material A	
Raw Material B	
...	

Source: Secondary Sources and Research, 2024

#### 10.1.2 Key Suppliers of Raw Materials

Table 117. Key Suppliers of Raw Materials

	Company	Website	Location
Raw Material A	Supplier 1		
	Supplier 2		
	Supplier 3		
	Supplier 4		
	Supplier 5		
Raw Material B	Supplier 1		
	Supplier 2		
	Supplier 3		
	Supplier 4		
	Supplier 5		

Source: Above companies; Secondary Sources and Research

### 10.2 Proportion of Manufacturing Cost Structure

Figure 78. Manufacturing Cost Structure of Liquid Runway Deicer

Source: Secondary Sources and Research, 2024

The raw materials include direct material, like raw materials, accessory material and packing materials.

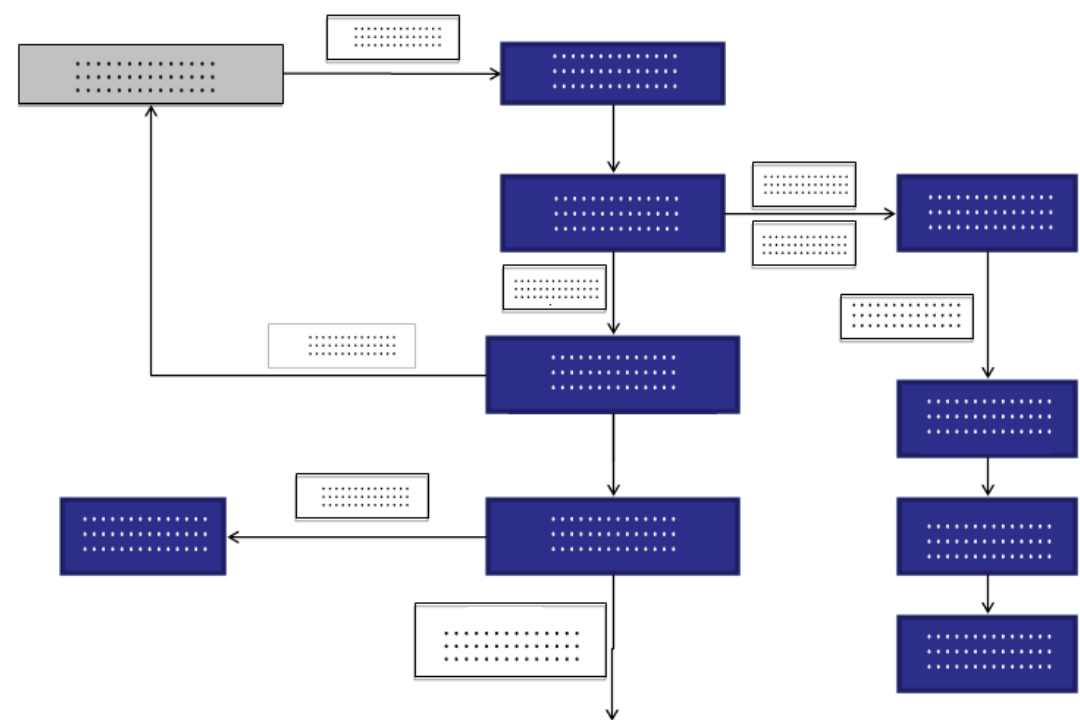
Direct Labor Costs includes the cost in the production line, like wages and welfare.



Manufacturing expenses includes a lot of items, like the depreciation costs for the equipment, plants, staff dormitories and storehouses, etc., also include the energy costs like water and electricity, industrial gas and steam, as well as expenses like Safety and Health, low-value consumables and spare parts, sporadic materials.

10.3 Manufacturing Process Analysis of Liquid Runway Deicer

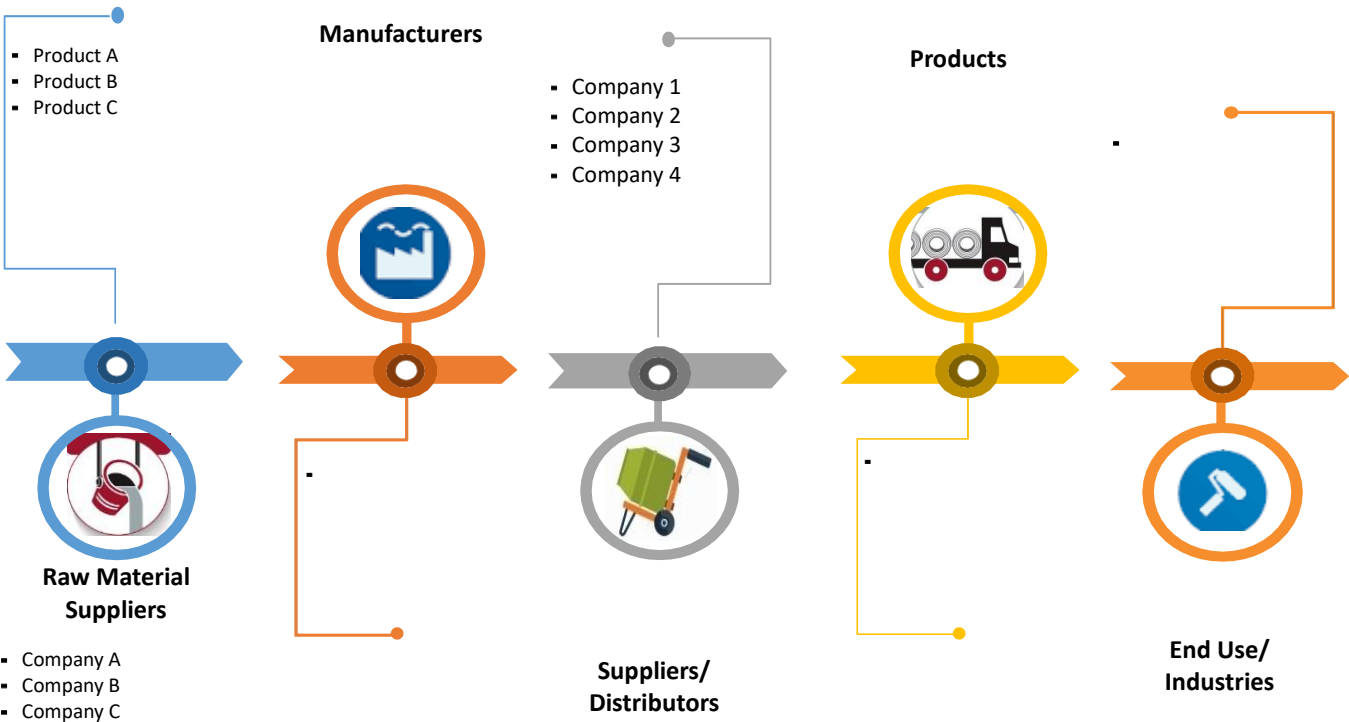
Figure 79. Manufacturing Process Analysis of Liquid Runway Deicer



Source: Secondary Sources and Research, 2024

10.4 Liquid Runway Deicer Industrial Chain Analysis

Figure 80. Liquid Runway Deicer Industrial Chain Analysis

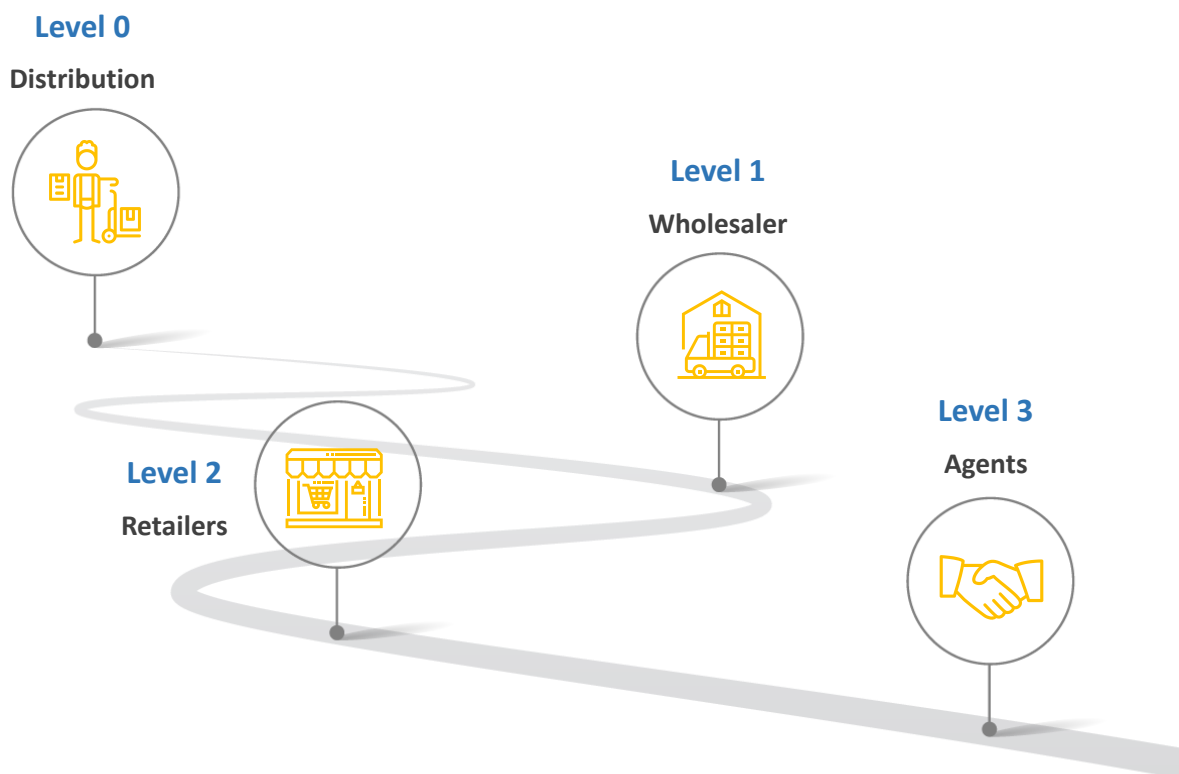


Source: Secondary Sources and Research, 2024

## 11 Marketing Channel, Distributors and Customers

### 11.1 Marketing Channel

Figure 81. Channels of Distribution



Source: Secondary Sources and Research, 2024

**Level Zero:** A level zero distribution channel is the simplest. It involves a direct sale from manufacturers to consumers with no intermediary.

**Level One:** A level one channel has one intermediary as the middleman between the producer and consumer. An example is a retailer between manufacturer and consumer.

**Level Two:** When thinking about levels, associate the number to the number of intermediaries. In this case, a level two channel involves two intermediaries between producer and consumer. An example here would be a wholesaler selling to a retailer who then sells to the consumer.

**Level Three:** Here's where an agent or broker comes in. Agents work on behalf of companies and deal primarily with wholesalers. From here, the wholesalers sell to retailers who then sell to consumers.

11.2 Liquid Runway Deicer Distributors List

Table 118. Liquid Runway Deicer Distributors List

Distributors	Website
Company 1	
Company 2	
Company 3	
Company 4	

Source: Above companies; Secondary Sources and Research, 2024

Figure 82. Distributors Profiles



Source: Secondary Sources and Research, 2024

A distributor is a wholesaler who assumes extra responsibility. In addition to fulfilling retailer orders, they actively sell products on behalf of the producers. From managing orders and returns to acting as a sales representative, they go beyond being the middleman between retailers and producers. They perform market analysis and are constantly searching for new opportMTies to achieve peak sales performance. A distributor focuses on a particular area and market which allows them to cultivate strong relationships with manufacturers. Unlike a wholesaler, they most likely have a stronger affiliation with particular companies. Distributors have a direct responsibility to making sure products are flying off retail shelves.

For example, one distributor may work out an agreement with a popular beverage company who works with them regularly, whereas wholesalers are used on a need-by-need basis. They have the option to sell to retailers and other sellers, or directly to consumers and businesses.

When working with distributors, brands have a responsibility to oversee the process and prevent retail execution errors like out of stocks and distribution voids. This requires setting up clear lines of communication between managers, sales teams, and distributors to ensure you get that information as clearly and quickly as

possible. Brands that are on top of their game form better relationships with their distributors and open up opportunities for expansion much easier than brands that communicate on an ad hoc basis.

### 11.3 Liquid Runway Deicer Customers

Table 119. Liquid Runway Deicer Customers List

Company	Website
Company 1	
Company 2	
Company 3	
Company 4	

Source: Above companies; Secondary Sources and Research, 2024

## 12 Liquid Runway Deicer Market Dynamics

### 12.1 Liquid Runway Deicer Industry Trends


Table 120. Liquid Runway Deicer Market Trends

Key Trends	Description

Source: Secondary Sources, Expert Interviews and Research, 2024

### 12.2 Liquid Runway Deicer Market Drivers

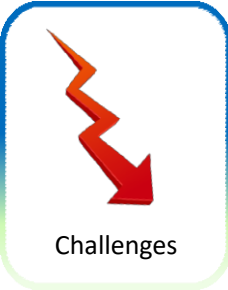
Table 121. Liquid Runway Deicer Market Drivers

	D1:		
	D2:		
	D3:		
Drivers	Short Term (1-2 years)	Medium Term (3-4 years)	Long Term (5 years)
D1	Medium	High	High
D2	High	Medium	Medium
D3	Medium	Medium	High

Source: Secondary Sources, Expert Interviews and Research, 2024

12.3 Liquid Runway Deicer Market Challenges

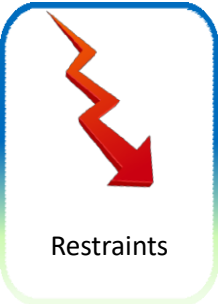
Table 122. Liquid Runway Deicer Market Challenges

	C1: High risks involved
	C2:
	C3:

Source: Secondary Sources, Expert Interviews and Research, 2024

12.4 Liquid Runway Deicer Market Restraints

Table 123. Liquid Runway Deicer Market Restraints

	R1:
	R2:
	R3:

Source: Secondary Sources, Expert Interviews and Research, 2024

## 13 Production and Supply Forecast

### 13.1 Global Forecasted Production of Liquid Runway Deicer by Region (2024-2030)

Table 124. Global Liquid Runway Deicer Production (Tons) Forecast by Region (2024-2030)

By Region	2024	2025	2026	2027	2028	2030
North America	XX	XX	XX	XX	XX	XX
Europe	XX	XX	XX	XX	XX	XX
Asia-Pacific	XX	XX	XX	XX	XX	XX
South America	XX	XX	XX	XX	XX	XX
Middle East & Africa						
Other Regions	XX	XX	XX	XX	XX	XX
Total	XX	XX	XX	XX	XX	XX

Source: Secondary Sources and Research, 2024

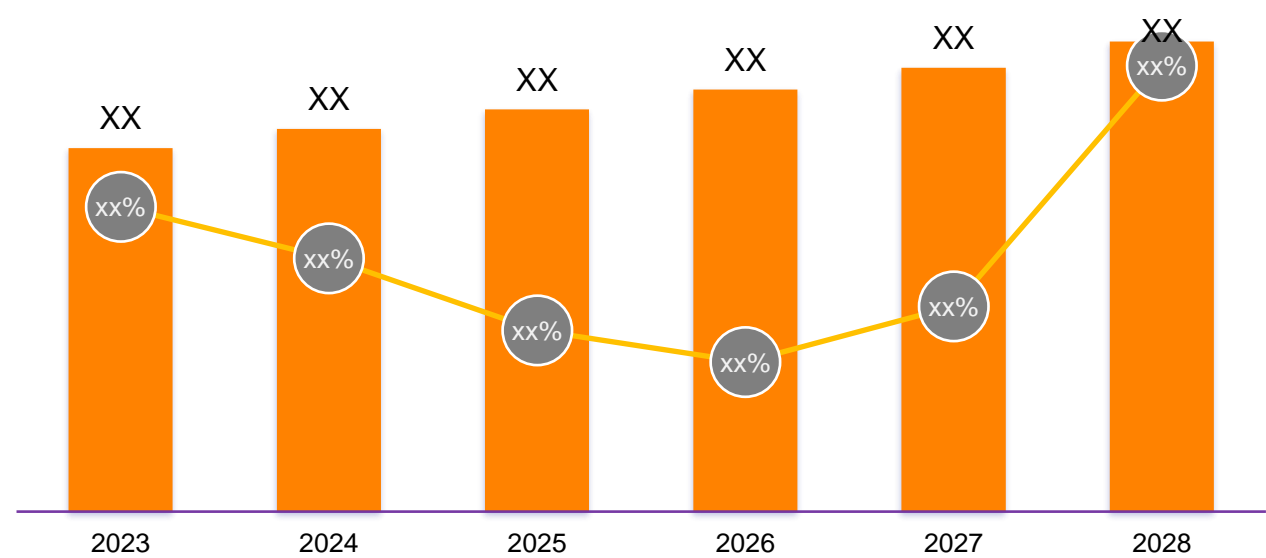
Figure 83. Global Liquid Runway Deicer Production Market Share Forecast by Region (2024-2030)

Source: Secondary Sources and Research, 2024



13.2 North America Liquid Runway Deicer Production, Revenue Forecast (2024-2030)

Figure 84. North America Liquid Runway Deicer Production (Tons) YoY Growth Rate Forecast (2024-2030)



Source: Secondary Sources and Research, 2024

13.3 Europe Liquid Runway Deicer Production, Revenue Forecast (2024-2030)

Figure 85. Europe Liquid Runway Deicer Production (Tons) YoY Growth Rate Forecast (2024-2030)

Source: Secondary Sources and Research, 2024

13.4 Asia-Pacific Liquid Runway Deicer Production, Revenue Forecast (2024-2030)

Figure 86. Asia-Pacific Liquid Runway Deicer Production (Tons) YoY Growth Rate Forecast (2024-2030)

Source: Secondary Sources and Research, 2024

### 13.5 South America Liquid Runway Deicer Production, Revenue Forecast (2024-2030)

**Figure 87. South America Liquid Runway Deicer Production (Tons) YoY Growth Rate Forecast (2024-2030)**

Source: Secondary Sources and Research, 2024

### 13.6 Middle East & Africa Liquid Runway Deicer Production, Revenue Forecast (2024-2030)

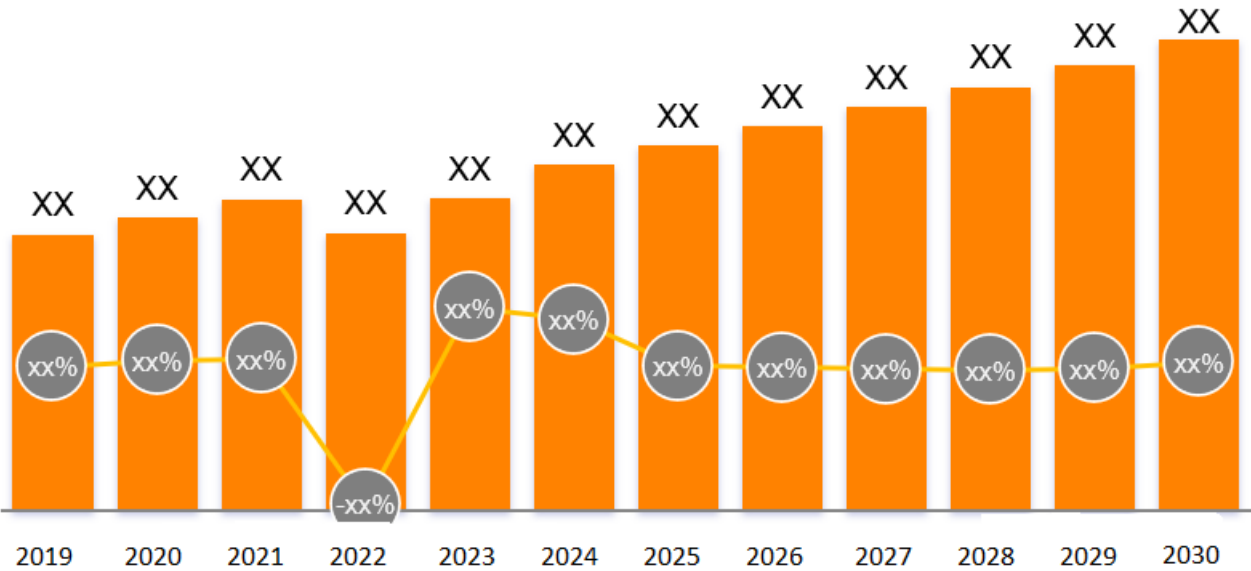
**Figure 88. Middle East & Africa Liquid Runway Deicer Production (Tons) YoY Growth Rate Forecast (2024-2030)**

Source: Secondary Sources and Research, 2024

14 Consumption and Demand Forecast

14.1 Global Forecasted Demand Analysis of Liquid Runway Deicer

Figure 89. Global Forecasted Demand Analysis of Liquid Runway Deicer (2019-2030) & (Tons)



Source: Secondary Sources, Expert Interviews and Research, 2024

14.2 North America Forecasted Consumption of Liquid Runway Deicer by Country

Table 125. North America Liquid Runway Deicer Consumption Forecast by Country (2024-2030) & (Tons)

North America	2024	2025	2026	2027	2028	2030
U.S.A	XX	XX	XX	XX	XX	XX
Canada	XX	XX	XX	XX	XX	XX
Total	XX	XX	XX	XX	XX	XX

Source: Secondary Sources, Expert Interviews and Research, 2024

### 14.3 Europe Market Forecasted Consumption of Liquid Runway Deicer by Country

**Table 126. Europe Liquid Runway Deicer Consumption Forecast by Country (2024-2030) & (Tons)**

Europe	2024	2025	2026	2027	2028	2030
Germany	XX	XX	XX	XX	XX	XX
France	XX	XX	XX	XX	XX	XX
U.K.	XX	XX	XX	XX	XX	XX
Italy	XX	XX	XX	XX	XX	XX
Russia	XX	XX	XX	XX	XX	XX
Rest of Europe	XX	XX	XX	XX	XX	XX
Total	XX	XX	XX	XX	XX	XX

Source: Secondary Sources, Expert Interviews and Research, 2024

### 14.4 Asia Pacific Market Forecasted Consumption of Liquid Runway Deicer by Region

**Table 127. Asia Pacific Liquid Runway Deicer Consumption Forecast by Region (2024-2030) & (Tons)**

Asia Pacific	2024	2025	2026	2027	2028	2030
China	XX	XX	XX	XX	XX	XX
Japan	XX	XX	XX	XX	XX	XX
South Korea	XX	XX	XX	XX	XX	XX
Taiwan	XX	XX	XX	XX	XX	XX
Southeast Asia	XX	XX	XX	XX	XX	XX
India	XX	XX	XX	XX	XX	XX
Vietnam						
Australia	XX	XX	XX	XX	XX	XX
Rest of Asia Pacific	XX	XX	XX	XX	XX	XX
Total	XX	XX	XX	XX	XX	XX

Source: Secondary Sources, Expert Interviews and Research, 2024

## 14.5 South America Forecasted Consumption of Liquid Runway Deicer by Country

Table 128. South America Liquid Runway Deicer Consumption Forecast by Country (2024-2030) & (Tons)

South America	2024	2025	2026	2027	2028	2030
Mexico	XX	XX	XX	XX	XX	XX
Brazil	XX	XX	XX	XX	XX	XX
Rest of South America	XX	XX	XX	XX	XX	XX
Middle East & Africa						
Total	XX	XX	XX	XX	XX	XX

Source: Secondary Sources, Expert Interviews and Research, 2024

15 Forecast by Type and by Application

15.1 Global Production, Revenue and Price Forecast by Type (2024-2030)

15.1.1 Global Forecasted Production of Liquid Runway Deicer by Type (2024-2030)

Table 129. Global Liquid Runway Deicer Production Forecast by Type (2024-2030) & (Tons)

Segment by Type	2024	2025	2026	2027	2028	2030
Alcohol Based Liquid	XX	XX	XX	XX	XX	XX
Sodium Acetate	XX	XX	XX	XX	XX	XX
Potassium Acetate						
Sodium Formate						
Potassium Formate						
Total	XX	XX	XX	XX	XX	XX

Source: Secondary Sources and Research, 2024

Figure 90. Global Liquid Runway Deicer Production Market Share Forecast by Type (2024-2030)

Source: Secondary Sources and Research, 2024

15.1.2 Global Forecasted Revenue of Liquid Runway Deicer by Type (2024-2030)

Table 130. Global Liquid Runway Deicer Revenue Forecast by Type (2024-2030) & (US\$ Million)

Segment by Type	2024	2025	2026	2027	2028	2030
Alcohol Based Liquid	XX	XX	XX	XX	XX	XX
Sodium Acetate	XX	XX	XX	XX	XX	XX
Potassium Acetate						
Sodium Formate						
Potassium Formate						
Total	XX	XX	XX	XX	XX	XX

Source: Secondary Sources and Research, 2024

Figure 91. Global Liquid Runway Deicer Revenue Market Share Forecast by Type (2024-2030)

Source: Secondary Sources and Research, 2023

### 15.1.3 Global Forecasted Price of Liquid Runway Deicer by Type (2024-2030)

**Table 131. Global Liquid Runway Deicer Price Forecast by Type (2024-2030) & (US\$/Ton)**

Segment by Type	2024	2025	2026	2027	2028	2030
Alcohol Based Liquid	XX	XX	XX	XX	XX	XX
Sodium Acetate	XX	XX	XX	XX	XX	XX
Potassium Acetate						
Sodium Formate						
Potassium Formate						

Source: Secondary Sources and Research, 2024

## 15.2 Global Production, Revenue and Price Forecast by Application (2024-2030)

### 15.2.1 Global Forecasted Production of Liquid Runway Deicer by Application (2024-2030)

**Table 132. Global Liquid Runway Deicer Production Forecast by Application (2024-2030) & (Tons)**

Segment by Application	2024	2025	2026	2027	2028	2030
Commercial Airports	XX	XX	XX	XX	XX	XX
Military Airfields	XX	XX	XX	XX	XX	XX
General Aviation						
Helipads						
Total	XX	XX	XX	XX	XX	XX

Source: Secondary Sources and Research, 2024

**Figure 92. Global Liquid Runway Deicer Production Market Share Forecast by Application (2024-2030)**

Source: Secondary Sources and Research, 2024

### 15.2.2 Global Forecasted Revenue of Liquid Runway Deicer by Application (2024-2030)

**Table 133. Global Liquid Runway Deicer Revenue Forecast by Application (2024-2030) & (US\$ Million)**

Segment by Application	2024	2025	2026	2027	2028	2030
Commercial Airports	XX	XX	XX	XX	XX	XX
Military Airfields	XX	XX	XX	XX	XX	XX
General Aviation						

**Helipads**

<b>Total</b>	XX	XX	XX	XX	XX	XX
--------------	----	----	----	----	----	----

Source: Secondary Sources and Research, 2024

**Figure 93. Global Liquid Runway Deicer Revenue Market Share Forecast by Application (2024-2030)**

Source: Secondary Sources and Research, 2023

**15.2.3 Global Forecasted Price of Liquid Runway Deicer by Application (2024-2030)****Table 134. Global Liquid Runway Deicer Price Forecast by Application (2024-2030) & (US\$/Ton)**

Segment by Application	2024	2025	2026	2027	2028	2030
<b>Commercial Airports</b>	XX	XX	XX	XX	XX	XX
<b>Military Airfields</b>	XX	XX	XX	XX	XX	XX
<b>General Aviation</b>						
<b>Helipads</b>						

Source: Secondary Sources and Research, 2024

**15.3 Global Production, Revenue and Price Forecast by End-Use (2024-2030)****15.3.1 Global Forecasted Production of Liquid Runway Deicer by End-Use (2024-2030)****Table 135. Global Liquid Runway Deicer Production Forecast by End-Use (2024-2030) & (Tons)**

Segment by End-Use	2024	2025	2026	2027	2028	2030
<b>Airlines</b>	XX	XX	XX	XX	XX	XX
<b>Airport Authorities</b>	XX	XX	XX	XX	XX	XX
<b>Military &amp; Defense Organizations</b>						
<b>General Aviation Operators</b>						
<b>Total</b>	XX	XX	XX	XX	XX	XX

Source: Secondary Sources and Research, 2024

**Figure 94. Global Liquid Runway Deicer Production Market Share Forecast by End-Use (2024-2030)**

Source: Secondary Sources and Research, 2024



### 15.3.2 Global Forecasted Revenue of Liquid Runway Deicer by End-Use (2024-2030)

**Table 136. Global Liquid Runway Deicer Revenue Forecast by End-Use (2024-2030) & (US\$ Million)**

Segment by End-Use	2024	2025	2026	2027	2028	2030
Airlines	XX	XX	XX	XX	XX	XX
Airport Authorities	XX	XX	XX	XX	XX	XX
Military & Defense Organizations						
General Aviation Operators						
Total	XX	XX	XX	XX	XX	XX

Source: Secondary Sources and Research, 2024

### Figure 95. Global Liquid Runway Deicer Revenue Market Share Forecast by End-Use (2024-2030)

Source: Secondary Sources and Research, 2023

### 15.3.3 Global Forecasted Price of Liquid Runway Deicer by End-Use (2024-2030)

**Table 137. Global Liquid Runway Deicer Price Forecast by End-Use (2024-2030) & (US\$/Ton)**

Segment by End-Use	2024	2025	2026	2027	2028	2030
Airlines	XX	XX	XX	XX	XX	XX
Airport Authorities	XX	XX	XX	XX	XX	XX
Military & Defense Organizations						
General Aviation Operators						

Source: Secondary Sources and Research, 2024

## 15.4 Global Production, Revenue and Price Forecast by Sub-typ2 (2024-2030)

### 15.4.1 Global Forecasted Production of Liquid Runway Deicer by Sub-typ2 (2024-2030)

**Table 138. Global Liquid Runway Deicer Production Forecast by Sub-typ2 (2024-2030) & (Tons)**

Segment by Sub-typ2	2024	2025	2026	2027	2028	2030
Sub-t1	XX	XX	XX	XX	XX	XX
Sub-t2	XX	XX	XX	XX	XX	XX
Sub-t3						
Sub-t4						
Total	XX	XX	XX	XX	XX	XX

Source: Secondary Sources and Research, 2024

Figure 96. Global Liquid Runway Deicer Production Market Share Forecast by Sub-typ2 (2024-2030)

Source: Secondary Sources and Research, 2024

15.4.2 Global Forecasted Revenue of Liquid Runway Deicer by Sub-typ2 (2024-2030)

Table 139. Global Liquid Runway Deicer Revenue Forecast by Sub-typ2 (2024-2030) & (US\$ Million)

Segment by Sub-typ2	2024	2025	2026	2027	2028	2030
Sub-t1	XX	XX	XX	XX	XX	XX
Sub-t2	XX	XX	XX	XX	XX	XX
Sub-t3						
Sub-t4						
Total	XX	XX	XX	XX	XX	XX

Source: Secondary Sources and Research, 2024

Figure 97. Global Liquid Runway Deicer Revenue Market Share Forecast by Sub-typ2 (2024-2030)

Source: Secondary Sources and Research, 2023

15.4.3 Global Forecasted Price of Liquid Runway Deicer by Sub-typ2 (2024-2030)

Table 140. Global Liquid Runway Deicer Price Forecast by Sub-typ2 (2024-2030) & (US\$/Ton)

Segment by Sub-typ2	2024	2025	2026	2027	2028	2030
Sub-t1	XX	XX	XX	XX	XX	XX
Sub-t2	XX	XX	XX	XX	XX	XX
Sub-t3						
Sub-t4						

Source: Secondary Sources and Research, 2024

## 16 Research Findings and Conclusion

...

...

...

Thanks for reading, for any question, please feel free to contact  
**+91 9169162030 (Asia) + 1 332 2424 294 (Int'l) [Ishan@24chemicalresearch.com](mailto:Ishan@24chemicalresearch.com)**

17 Methodology and Data Source

17.1 Methodology/Research Approach

This research study involved the extensive usage of both primary and secondary data sources. The research process involved the study of various factors affecting the industry, including the government policy, market environment, competitive landscape, historical data, present trends in the market, technological innovation, upcoming technologies and the technical progress in related industry, and market risks, opportMTies, market barriers and challenges. The following illustrative figure shows the market research methodology applied in this report.

17.1.1 Research Programs/Design

Table 141. Research Programs/Design for This Report

Research Design		
Historical Data (2018-2022)	<ul style="list-style-type: none"><li>Industry Trends</li></ul>	<ul style="list-style-type: none"><li>Global Market Size (Volume and Value)</li><li>Status and Outlook</li></ul>
	<ul style="list-style-type: none"><li>Competitive Landscape</li></ul>	<ul style="list-style-type: none"><li>Volume and Value for Major Players</li></ul>
	<ul style="list-style-type: none"><li>By Manufacturers</li></ul>	<ul style="list-style-type: none"><li>Market Share</li></ul>
	<ul style="list-style-type: none"><li>Expansion</li></ul>	<ul style="list-style-type: none"><li>YoY Growth Rate</li></ul>
	<ul style="list-style-type: none"><li>Mergers and Acquisitions</li></ul>	<ul style="list-style-type: none"><li>Present Situation Analysis</li></ul>
	<ul style="list-style-type: none"><li>Market Segment</li></ul>	<ul style="list-style-type: none"><li>Volume and Value</li></ul>
	<ul style="list-style-type: none"><li>by Type</li></ul>	<ul style="list-style-type: none"><li>Market Share</li></ul>
	<ul style="list-style-type: none"><li>by Application</li></ul>	<ul style="list-style-type: none"><li>YoY Growth Rate</li></ul>
Influencing Factors	<ul style="list-style-type: none"><li>By Region/Geography</li></ul>	<ul style="list-style-type: none"><li>Present Situation Analysis</li></ul>
	<ul style="list-style-type: none"><li>Market Environment</li></ul>	<ul style="list-style-type: none"><li>Growth Drivers</li></ul>
	<ul style="list-style-type: none"><li>Government Policy</li></ul>	<ul style="list-style-type: none"><li>Growing Demand of Downstream</li></ul>
	<ul style="list-style-type: none"><li>Technological Changes</li></ul>	<ul style="list-style-type: none"><li>Reduction in Cost</li></ul>
Market Forecast (2023-2030)	<ul style="list-style-type: none"><li>Market Risks</li></ul>	<ul style="list-style-type: none"><li>Market OpportMTies and Challenges</li></ul>
	<ul style="list-style-type: none"><li>Market Size Forecast</li></ul>	<ul style="list-style-type: none"><li>Key Data</li></ul>
	<ul style="list-style-type: none"><li>Global Overall Size</li></ul>	<ul style="list-style-type: none"><li>Market Size (Volume and Value)</li></ul>
	<ul style="list-style-type: none"><li>by Type</li></ul>	<ul style="list-style-type: none"><li>Market Share</li></ul>

- 
- by Application
  - By Region/Geography
  - YoY Growth Rate
  - YoY Growth Rate
- 

### 17.1.2 Market Size Estimation

Top-down and bottom-up approaches are used to validate the global Liquid Runway Deicer market size and to estimate the market size for company, regional division, product type and application (end users).

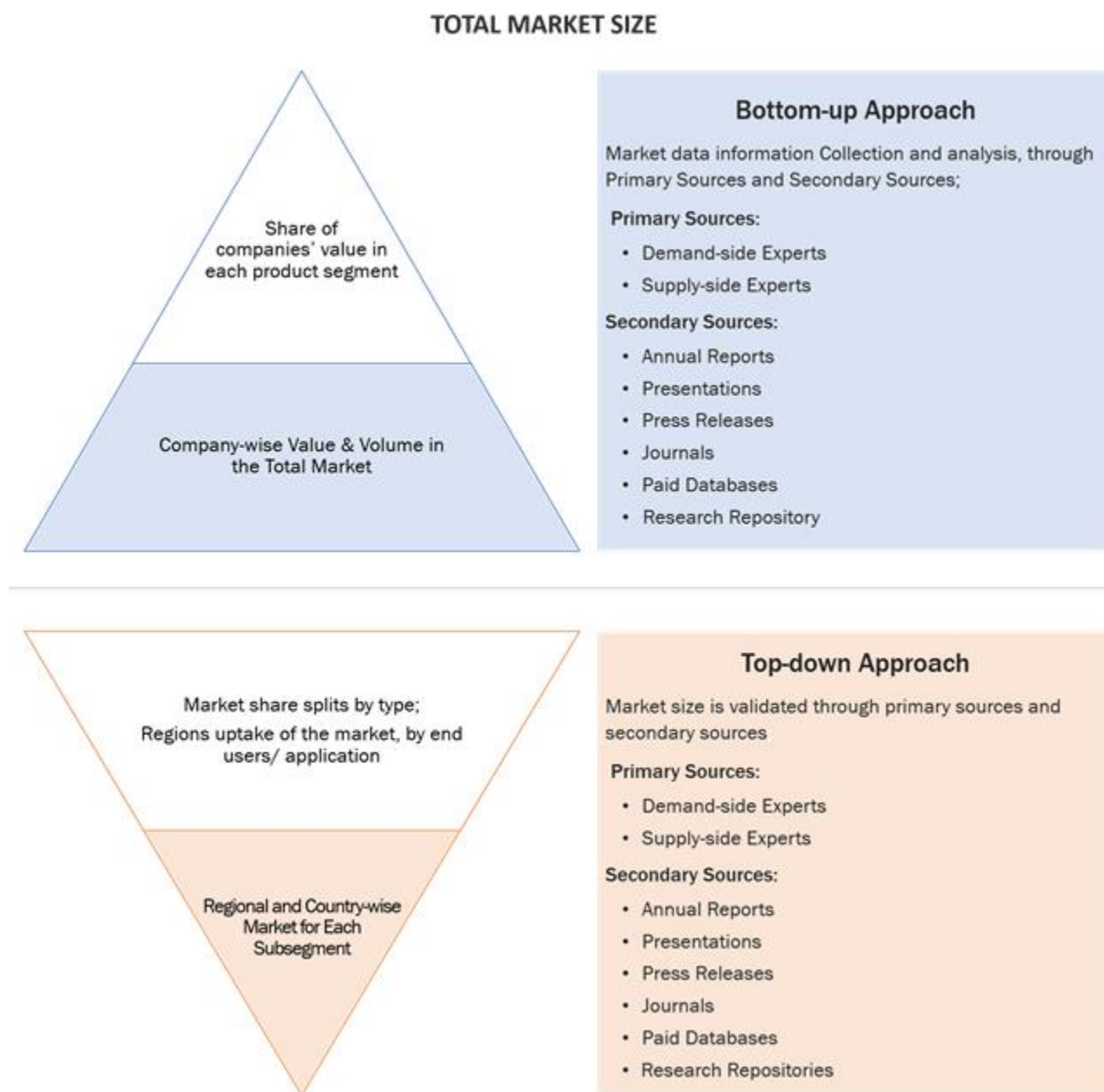
The market estimations in this report are based on the marketed sale price of Liquid Runway Deicer (excluding any discounts provided by the manufacturer, distributor, wholesaler or traders). The percentage splits, market shares, and breakdowns of the product segments are derived on the basis of weights assigned to each of the segments on the basis of their utilization rate and average sale price. The regional splits of the overall Liquid Runway Deicer market and its sub-segments are based on the percentage adoption or utilization of the given product in the respective region or country.

Major manufacturers in the market are identified through secondary research and their market revenues are determined through primary and secondary research. Secondary research includes the research of the annual financial reports of the top companies; while primary research includes extensive interviews of key opinion leaders and industry experts such as experienced front-line staffs, directors, CEOs and marketing executives. The percentage splits, market shares, YoY Growth Rates and breakdowns of the product markets are determined through secondary sources and verified through the primary sources.

All possible factors that influence the markets included in this research study have been accounted for, viewed in extensive detail, verified through primary research, and analyzed to get the final quantitative and qualitative data. The market size for top-level markets and sub-segments is normalized, and the effect of inflation, economic downturns, and regulatory & policy changes or other factors are accounted for in the market forecast. This data is combined and added with detailed inputs and analysis from Research and presented in this report.

The following figure shows an illustrative representation of the overall market size estimation process used for this study.

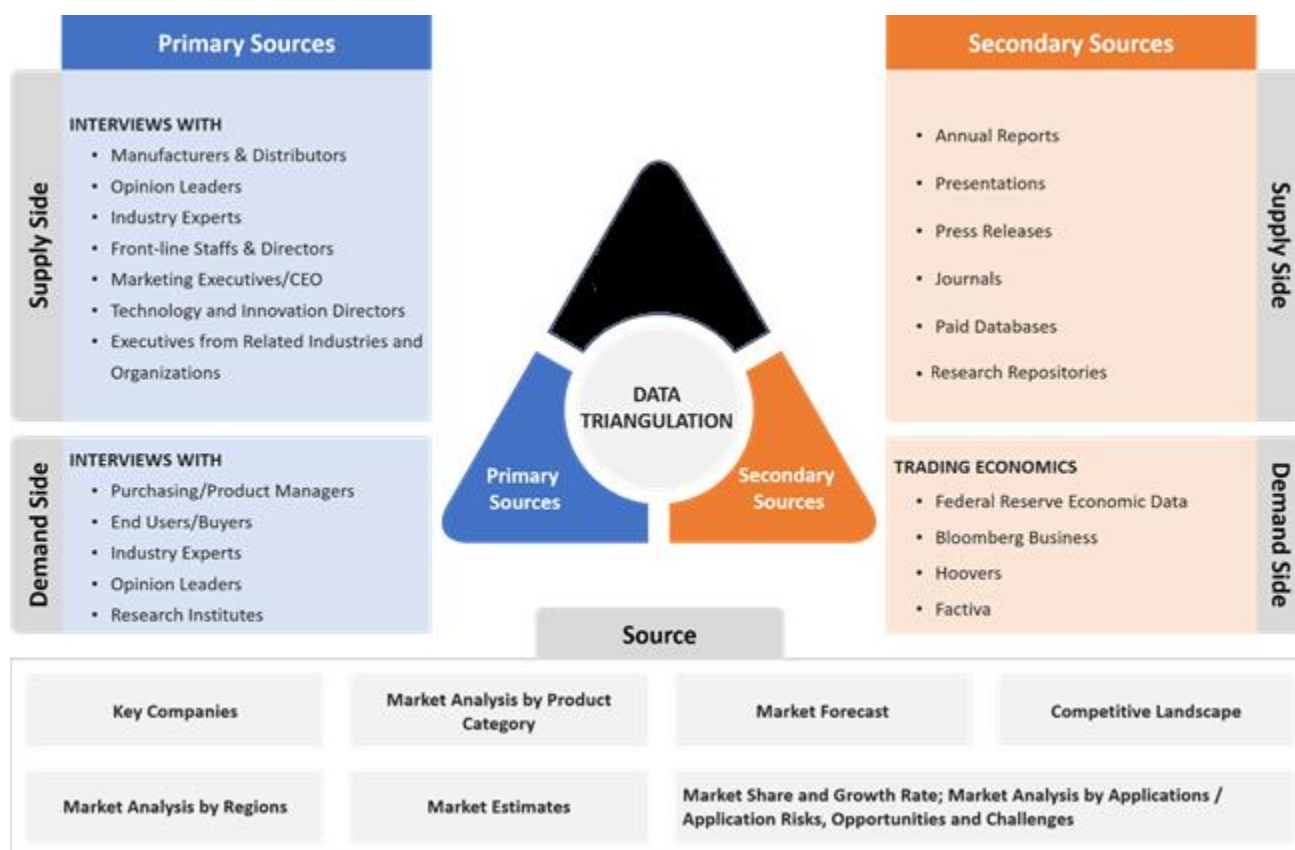
Figure 98. Bottom-up and Top-down Approaches for This Report



### 17.1.3 Market Breakdown and Data Triangulation

After complete market engineering with calculations for market statistics; market size estimations; market forecasting; market breakdown; and data triangulation, extensive primary research was conducted to gather information and verify and validate the critical numbers arrived at. In the complete market engineering process, both top-down and bottom-up approaches were extensively used, along with several data triangulation methods, to perform market estimation and market forecasting for the overall market segments and sub-segments listed in this report. Extensive qualitative and further quantitative analysis is also done from all the numbers arrived at in the complete market engineering process to list key information throughout the report.

Figure 99. Data Triangulation



## 17.2 Data Source

### 17.2.1 Secondary Sources

Secondary Sources occupies Approximately 25% of Sources, such as press releases, annual reports, Non-Profit organizations, industry associations, governmental agencies and customs data, and so on; This research study involved the usage of widespread secondary sources; directories; databases such as Bloomberg Business, Wind Info, Hoovers, Factiva (Dow Jones & Company), TRADING ECONOMICS, and avention; Investing News Network; statista; Federal Reserve Economic Data; annual reports; BIS Statistics; ICIS; company house documents; CAS(American Chemical Society); investor presentations; and SEC filings of companies. Secondary research was used to identify and collect information useful for the extensive, technical, market-oriented, and commercial study of the Liquid Runway Deicer market. It was also used to obtain important information about the top players, market classification and segmentation according to industry trends to the bottom-most level, and key developments related to market and technology perspectives.

Table 142. Key Data Information from Secondary Sources

Parameters	Key Data	Sources
Market Size	● Segmental Revenue	● Journals, Websites, and Press

Market Position of Top Players	● Geographic Penetration	Releases
	● Product Adoption Rate for Different End Users	● Annual Reports and SEC Filings
	● Product Pricing	● Company Websites and Press Releases
	● Product Financials	● Public and Paid Databases
	● Geographic Revenue Mix	● Research Data Repository
	● Total Company Revenue	
	● Business/Segmental Revenue Mix	
	● Influence Factors	● Company Websites and Press Releases
Qualitative Analysis	● Market Potential	● Public and Paid Databases
	● Market Risks and Opportunities	● Annual Reports
	● Industry Trends	● Industry Associations
	● Geographical Features	● Research Data Repository
	● Government Policies	

### 17.2.2 Primary Sources

In the primary research process, various sources from both the supply and demand sides were interviewed to obtain qualitative and quantitative information for this report. The primary sources from the supply side include product manufacturers (and their competitors), opinion leaders, industry experts, research institutions, distributors, dealer and traders, as well as the raw materials suppliers and producers, etc.

The primary sources from the demand side include industry experts such as business leaders, marketing and sales directors, technology and innovation directors, supply chain executive, end users (product buyers), and related key executives from various key companies and organizations operating in the global market.

Primary research was conducted to identify segmentation Type, product price range, product Application, key players, raw materials supply and the downstream demand, industry status and outlook, and key market dynamics such as risks, influence factors, opportunities, market barriers, industry trends, and key player strategies.

**Table 143. Key Data Information from Primary Sources**

Primary Sources	Parameters	Key Data
Market Segments	● Market Size by Type	● Production, Revenue Market Share by Type
	● Status and Outlook	● Production, Revenue and YoY Growth Rate by Type
	● Market Data by Application	● Consumption by Application
	● Status and Outlook	● Percentage and YoY Growth Rate by Application
	● Market Data by	● Production, YoY Growth Rate and Market



Market Segments by Region	Region, Status and Outlook	Share by Region
		<ul style="list-style-type: none"><li>● Revenue (Value), YoY Growth Rate and Market Share by Region</li><li>● Consumption, YoY Growth Rate and Market Share by Region</li></ul>
Global Market	<ul style="list-style-type: none"><li>● Global Overall Size, Present Situation and Forecast</li></ul>	<ul style="list-style-type: none"><li>● Global Market Size (Volume) Status and Forecast</li></ul>
		<ul style="list-style-type: none"><li>● Global Market Size Status and Forecast</li></ul>

17.3 Author List

First Author	Second Author

17.4 Disclaimer

## 18 Appendix

### 18.1 Note

- This table of contents (TOC) is tentative and is subject to further refinement during the course of the research
- Enlisted companies represent partial list of market participants. Profiles of specific companies if required, shall be added to the report upon request
- Company figures and market share is subject to companies reporting sales in public domain and data availability through primary interviews
- Market segmentation or taxonomy is tentative and is subject to change upon further detailed analysis of the target market
- Country level coverage in key regions subject to change as per market dynamics in respective regions

### 18.2 Examples of Clients



## LIST OF TABLES

Table 1. Global Liquid Runway Deicer Market Size by Type (Tons) & (US\$ Million) & (2023 VS 2030) .....	3
Table 2. Global Liquid Runway Deicer Market Size by Application (Tons) & (US\$ Million) & (2023 VS 2030).....	5
Table 3. Liquid Runway Deicer Market Size Comparison by Region: 2019 VS 2023 VS 2030 .....	9
Table 4. Global Liquid Runway Deicer Production by Manufacturers (2019-2023) & (Tons) .....	20
Table 5. Global Liquid Runway Deicer Production Market Share by Manufacturers (2019-2023).....	21
Table 6. Global Liquid Runway Deicer Revenue by Manufacturers (2019-2024) & (US\$ Million).....	22
Table 7. Global Liquid Runway Deicer Revenue Share by Manufacturers (2019-2023) .....	22
Table 8. Company Type (Tier 1, Tier 2, and Tier 3) & (based on the Revenue in Liquid Runway Deicer as of 2023) .....	23
Table 9. Global Market Liquid Runway Deicer Average Price (US\$/Ton) of Key Manufacturers (2019-2023).....	24
Table 10. Manufacturers Liquid Runway Deicer Production Sites and Area Served .....	25
Table 11. Manufacturers Liquid Runway Deicer Product Type.....	26
Table 12. Global Liquid Runway Deicer Manufacturers Market Concentration Ratio (CR5 and HHI) .....	27
Table 13. Mergers & Acquisitions, Expansion Plans.....	27
Table 14. Global Liquid Runway Deicer Production (Tons) by Region (2019-2024) .....	28
Table 15. Global Liquid Runway Deicer Revenue (US\$ Million) by Region (2019-2024) .....	29
Table 16. Global Liquid Runway Deicer Revenue Market Share by Region (2019-2024) .....	29
Table 17. Global Liquid Runway Deicer Production (Tons), Revenue (US\$ Million), Price (US\$/Ton) and Gross Margin (2019-2023) .....	29
Table 18. North America Liquid Runway Deicer Production (Tons), Revenue (US\$ Million), Price (US\$/Ton) and Gross Margin (2019-2024).....	30
Table 19. Europe Liquid Runway Deicer Production (Tons), Revenue (US\$ Million), Price (US\$/Ton) and Gross Margin (2019-2024) .....	31
Table 20. Asia-Pacific Liquid Runway Deicer Production (Tons), Revenue (US\$ Million), Price (US\$/Ton) and Gross Margin (2019-2024) .....	31
Table 21. South America Liquid Runway Deicer Production (Tons), Revenue (US\$ Million), Price (US\$/Ton) and Gross Margin (2019-2024).....	32
Table 22. Middle East & Africa Liquid Runway Deicer Production (Tons), Revenue (US\$ Million), Price (US\$/Ton) and Gross Margin (2019-2024).....	32
Table 23. Global Liquid Runway Deicer Consumption by Region (2019-2024) & (Tons) .....	33
Table 24. Global Liquid Runway Deicer Consumption Market Share by Region (2019-2024).....	33
Table 25. North America Liquid Runway Deicer Consumption by Country (2019-2024) & (Tons).....	34
Table 26. North America LIQUID RUNWAY DEICER Sales, Consumption, Export, Import (2019-2023).....	35
Table 27. Europe Liquid Runway Deicer Consumption by Country (2019-2024) & (Tons) .....	37
Table 28. Europe LIQUID RUNWAY DEICER Sales, Consumption, Export, Import (2019-2023).....	37
Table 29. Asia Pacific Liquid Runway Deicer Consumption by Region (2019-2024) & (Tons).....	39
Table 30. Asia Pacific LIQUID RUNWAY DEICER Sales, Consumption, Export, Import (2019-2023) .....	39
Table 31. South America Liquid Runway Deicer Consumption by YoY Country (2019-2024) & (Tons) .....	41
Table 32. Middle East & Africa Liquid Runway Deicer Consumption by YoY Country (2019-2024) & (Tons) .....	42
Table 33. Global Liquid Runway Deicer Production (Tons) by Type (2019-2024).....	44
Table 34. Global Liquid Runway Deicer Production Market Share by Type (2019-2024).....	44
Table 35. Global Liquid Runway Deicer Revenue (US\$ Million) by Type (2019-2024) .....	45
Table 36. Global Liquid Runway Deicer Revenue Share by Type (2019-2024) .....	45

Table 37. Global Liquid Runway Deicer Price (US\$/Ton) by Type (2019-2024) .....	45
Table 38. Global Liquid Runway Deicer Production (Tons) by Application (2019-2024) .....	46
Table 39. Global Liquid Runway Deicer Production Market Share by Application (2019-2024) .....	46
Table 40. Global Liquid Runway Deicer Revenue (US\$ Million) by Application (2019-2024) .....	47
Table 41. Global Liquid Runway Deicer Revenue Share by Application (2019-2024) .....	47
Table 42. Global Liquid Runway Deicer Price (US\$/Ton) by Application (2019-2024) .....	47
Table 43. Global Liquid Runway Deicer Production (Tons) by End-Use (2019-2024) .....	48
Table 44. Global Liquid Runway Deicer Production Market Share by End-Use (2019-2024) .....	48
Table 45. Global Liquid Runway Deicer Revenue (US\$ Million) by End-Use (2019-2024) .....	49
Table 46. Global Liquid Runway Deicer Revenue Share by End-Use (2019-2024) .....	49
Table 47. Global Liquid Runway Deicer Price (US\$/Ton) by End-Use (2019-2024) .....	49
Table 48. Cryotech Liquid Runway Deicer Corporation Information .....	51
Table 49. Cryotech Liquid Runway Deicer Specification and Application .....	51
Table 50. Cryotech Liquid Runway Deicer Production (Tons), Revenue (US\$ Million), Price (US\$/Ton), Ex-Factory Price (\$/Volume), Capacity (Volume), Cost (\$/Volume) and Gross Margin (2019-2024) .....	52
Table 51. Cryotech Main Business and Markets Served .....	52
Table 52. Cryotech Recent Developments/Updates .....	52
Table 53. Proviron Liquid Runway Deicer Corporation Information .....	53
Table 54. Proviron Liquid Runway Deicer Specification and Application .....	53
Table 55. Proviron Liquid Runway Deicer Production (Tons), Revenue (US\$ Million), Price (US\$/Ton), Ex-Factory Price (\$/Volume), Capacity (Volume), Cost (\$/Volume) and Gross Margin (2019-2024) .....	54
Table 56. Proviron Main Business and Markets Served .....	54
Table 57. Proviron Recent Developments/Updates .....	54
Table 58. Perstorp Liquid Runway Deicer Corporation Information .....	55
Table 59. Perstorp Liquid Runway Deicer Specification and Application .....	55
Table 60. Perstorp Liquid Runway Deicer Production (Tons), Revenue (US\$ Million), Price (US\$/Ton), Ex-Factory Price (\$/Volume), Capacity (Volume), Cost (\$/Volume) and Gross Margin (2019-2024) .....	55
Table 61. Perstorp Main Business and Markets Served .....	56
Table 62. Perstorp Recent Developments/Updates .....	56
Table 63. Clariant Liquid Runway Deicer Corporation Information .....	56
Table 64. Clariant Liquid Runway Deicer Specification and Application .....	57
Table 65. Clariant Liquid Runway Deicer Production (Tons), Revenue (US\$ Million), Price (US\$/Ton), Ex-Factory Price (\$/Volume), Capacity (Volume), Cost (\$/Volume) and Gross Margin (2019-2024) .....	57
Table 66. Clariant Main Business and Markets Served .....	57
Table 67. Clariant Recent Developments/Updates .....	58
Table 68. LNT Group Liquid Runway Deicer Corporation Information .....	58
Table 69. LNT Group Liquid Runway Deicer Specification and Application .....	58
Table 70. LNT Group Liquid Runway Deicer Production (Tons), Revenue (US\$ Million), Price (US\$/Ton), Ex-Factory Price (\$/Volume), Capacity (Volume), Cost (\$/Volume) and Gross Margin (2019-2024) .....	59
Table 71. LNT Group Main Business and Markets Served .....	59
Table 72. LNT Group Recent Developments/Updates .....	59
Table 73. TR Bonnyman Son & Company Liquid Runway Deicer Corporation Information .....	60
Table 74. TR Bonnyman Son & Company Liquid Runway Deicer Specification and Application .....	60
Table 75. TR Bonnyman Son & Company Liquid Runway Deicer Production (Tons), Revenue (US\$ Million), Price	

(US\$/Ton), Ex-Factory Price (\$/Volume), Capacity (Volume), Cost (\$/Volume) and Gross Margin (2019-2024)	60
Table 76. TR Bonnyman Son & Company Main Business and Markets Served .....	61
Table 77. TR Bonnyman Son & Company Recent Developments/Updates .....	61
Table 78. KILFROST Liquid Runway Deicer Corporation Information .....	61
Table 79. Kilfrost Liquid Runway Deicer Production (Tons), Revenue (US\$ Million), Price (US\$/Ton), Ex-Factory Price (\$/Volume), Capacity (Volume), Cost (\$/Volume) and Gross Margin (2019-2024) .....	62
Table 80. KILFROST Main Business and Markets Served .....	62
Table 81. KILFROST Recent Developments/Updates .....	62
Table 82. Harmony Deicing Liquid Runway Deicer Corporation Information .....	63
Table 83. Harmony Deicing Liquid Runway Deicer Specification and Application .....	63
Table 84. Harmony Deicing Liquid Runway Deicer Production (Tons), Revenue (US\$ Million), Price (US\$/Ton), Ex-Factory Price (\$/Volume), Capacity (Volume), Cost (\$/Volume) and Gross Margin (2019-2024) .....	63
Table 85. Harmony Deicing Main Business and Markets Served .....	64
Table 86. Harmony Deicing Recent Developments/Updates .....	64
Table 87. Esseco Liquid Runway Deicer Corporation Information .....	64
Table 88. Esseco Liquid Runway Deicer Specification and Application .....	65
Table 89. Esseco Liquid Runway Deicer Production (Tons), Revenue (US\$ Million), Price (US\$/Ton), Ex-Factory Price (\$/Volume), Capacity (Volume), Cost (\$/Volume) and Gross Margin (2019-2024) .....	65
Table 90. Esseco Main Business and Markets Served .....	65
Table 91. Esseco Recent Developments/Updates .....	65
Table 92. Seneca Liquid Runway Deicer Corporation Information .....	66
Table 93. Seneca Liquid Runway Deicer Specification and Application .....	66
Table 94. Seneca Liquid Runway Deicer Production (Tons), Revenue (US\$ Million), Price (US\$/Ton), Ex-Factory Price (\$/Volume), Capacity (Volume), Cost (\$/Volume) and Gross Margin (2019-2024) .....	66
Table 95. Seneca Main Business and Markets Served .....	67
Table 96. Seneca Recent Developments/Updates .....	67
Table 97. OMEX Liquid Runway Deicer Corporation Information .....	67
Table 98. OMEX Liquid Runway Deicer Production (Tons), Revenue (US\$ Million), Price (US\$/Ton), Ex-Factory Price (\$/Volume), Capacity (Volume), Cost (\$/Volume) and Gross Margin (2019-2024) .....	68
Table 99. OMEX Main Business and Markets Served .....	68
Table 100. OMEX Recent Developments/Updates .....	68
Table 101. Pelican Chemicals Liquid Runway Deicer Corporation Information .....	69
Table 102. Pelican Chemicals Liquid Runway Deicer Specification and Application .....	69
Table 103. Pelican Chemicals Liquid Runway Deicer Production (Tons), Revenue (US\$ Million), Price (US\$/Ton), Ex-Factory Price (\$/Volume), Capacity (Volume), Cost (\$/Volume) and Gross Margin (2019-2024) .....	69
Table 104. Pelican Chemicals Main Business and Markets Served .....	70
Table 105. Pelican Chemicals Recent Developments/Updates .....	70
Table 106. UltraBlue Liquid Runway Deicer Corporation Information .....	70
Table 107. UltraBlue Liquid Runway Deicer Specification and Application .....	71
Table 108. UltraBlue Liquid Runway Deicer Production (Tons), Revenue (US\$ Million), Price (US\$/Ton), Ex-Factory Price (\$/Volume), Capacity (Volume), Cost (\$/Volume) and Gross Margin (2019-2024) .....	71
Table 109. UltraBlue Main Business and Markets Served .....	71
Table 110. UltraBlue Recent Developments/Updates .....	72
Table 111. Boschung Liquid Runway Deicer Corporation Information .....	72

Table 112. Boschung Liquid Runway Deicer Specification and Application .....	72
Table 113. Boschung Liquid Runway Deicer Production (Tons), Revenue (US\$ Million), Price (US\$/Ton), Ex-Factory Price (\$/Volume), Capacity (Volume), Cost (\$/Volume) and Gross Margin (2019-2024) .....	73
Table 114. Boschung Main Business and Markets Served .....	73
Table 115. Boschung Recent Developments/Updates .....	73
Table 116. Production Base and Market Concentration Rate of Raw Material.....	74
Table 117. Key Suppliers of Raw Materials .....	74
Table 118. Liquid Runway Deicer Distributors List .....	78
Table 119. Liquid Runway Deicer Customers List .....	79
Table 120. Liquid Runway Deicer Market Trends .....	80
Table 121. Liquid Runway Deicer Market Drivers .....	80
Table 122. Liquid Runway Deicer Market Challenges .....	81
Table 123. Liquid Runway Deicer Market Restraints .....	81
Table 124. Global Liquid Runway Deicer Production (Tons) Forecast by Region (2024-2030) .....	82
Table 125. North America Liquid Runway Deicer Consumption Forecast by Country (2024-2030) & (Tons) .....	85
Table 126. Europe Liquid Runway Deicer Consumption Forecast by Country (2024-2030) & (Tons) .....	86
Table 127. Asia Pacific Liquid Runway Deicer Consumption Forecast by Region (2024-2030) & (Tons) .....	86
Table 128. South America Liquid Runway Deicer Consumption Forecast by Country (2024-2030) & (Tons) .....	87
Table 129. Global Liquid Runway Deicer Production Forecast by Type (2024-2030) & (Tons).....	88
Table 130. Global Liquid Runway Deicer Revenue Forecast by Type (2024-2030) & (US\$ Million) .....	88
Table 131. Global Liquid Runway Deicer Price Forecast by Type (2024-2030) & (US\$/Ton) .....	89
Table 132. Global Liquid Runway Deicer Production Forecast by Application (2024-2030) & (Tons) .....	89
Table 133. Global Liquid Runway Deicer Revenue Forecast by Application (2024-2030) & (US\$ Million) .....	89
Table 134. Global Liquid Runway Deicer Price Forecast by Application (2024-2030) & (US\$/Ton) .....	90
Table 135. Global Liquid Runway Deicer Production Forecast by End-Use (2024-2030) & (Tons).....	90
Table 136. Global Liquid Runway Deicer Revenue Forecast by End-Use (2024-2030) & (US\$ Million).....	91
Table 137. Global Liquid Runway Deicer Price Forecast by End-Use (2024-2030) & (US\$/Ton) .....	91
Table 138. Global Liquid Runway Deicer Production Forecast by Sub-typ2 (2024-2030) & (Tons) .....	91
Table 139. Global Liquid Runway Deicer Revenue Forecast by Sub-typ2 (2024-2030) & (US\$ Million).....	92
Table 140. Global Liquid Runway Deicer Price Forecast by Sub-typ2 (2024-2030) & (US\$/Ton) .....	92
Table 141. Research Programs/Design for This Report .....	94
Table 142. Key Data Information from Secondary Sources .....	97
Table 143. Key Data Information from Primary Sources .....	98

## LIST OF FIGURES

Figure 1. Product Picture of Liquid Runway Deicer.....	3
Figure 2. Global Liquid Runway Deicer Market Share by Type: 2023 VS 2030.....	4
Figure 3. Alcohol Based Liquid Product Picture .....	4
Figure 4. Sodium Acetate Product Picture .....	4
Figure 5. Global Liquid Runway Deicer Market Share by Application: 2023 VS 2030 .....	6
Figure 6. Commercial Airports .....	6
Figure 7. Military Airfields.....	6
Figure 8. General Aviation.....	6
Figure 9. Helipads .....	7
Figure 10. Global Liquid Runway Deicer Revenue (US\$ Million), 2019 VS 2023 VS 2030 .....	7
Figure 11. Global Liquid Runway Deicer Revenue (US\$ Million) (2019-2030) .....	8
Figure 12. Global Liquid Runway Deicer Production (Tons) & (2019-2030) .....	8
Figure 13. Liquid Runway Deicer Market Size Comparison by Region: 2018 VS 2023 VS 2030 .....	10
Figure 14. North America Liquid Runway Deicer Revenue (US\$ Million) YoY Growth Rate (2019-2030) .....	10
Figure 15. Europe Liquid Runway Deicer Revenue (US\$ Million) YoY Growth Rate (2019-2030) .....	11
Figure 16. Asia-Pacific Liquid Runway Deicer Revenue (US\$ Million) YoY Growth Rate (2019-2030).....	12
Figure 17. South America Liquid Runway Deicer Revenue (US\$ Million) YoY Growth Rate (2019-2030) .....	12
Figure 18. Middle East & Africa Liquid Runway Deicer Revenue (US\$ Million) YoY Growth Rate (2019-2030) .....	13
Figure 19. SWOT Analysis.....	14
Figure 20. PESTEL Analysis .....	15
Figure 21. Porter's Five Forces Analysis .....	18
Figure 22. Liquid Runway Deicer Production Share by Manufacturers in 2023 .....	21
Figure 23. Global Liquid Runway Deicer Revenue Share by Manufacturers in 2023 .....	23
Figure 24. Liquid Runway Deicer Market Share by Company Type (Tier 1, Tier 2, and Tier 3): 2019 VS 2023.....	24
Figure 25. Global Market Liquid Runway Deicer Average Price (US\$/Ton) of Key Manufacturers in 2023 .....	25
Figure 26. The Global 5 and 10 Largest Players: Market Share by Liquid Runway Deicer Revenue in 2023 .....	27
Figure 27. Global Liquid Runway Deicer Production Market Share by Region (2019-2024) .....	28
Figure 28. North America Liquid Runway Deicer Production (Tons) YoY Growth Rate (2019-2023).....	30
Figure 29. Europe Liquid Runway Deicer Production (Tons) YoY Growth Rate (2019-2024).....	30
Figure 30. Asia-Pacific Liquid Runway Deicer Production (Tons) YoY Growth Rate (2019-2024) .....	31
Figure 31. South America Liquid Runway Deicer Production (Tons) YoY Growth Rate (2019-2024).....	31
Figure 32. Middle East & Africa Liquid Runway Deicer Production (Tons) YoY Growth Rate (2019-2024) .....	32
Figure 33. Global Liquid Runway Deicer Consumption Market Share by Region (2019-2024) .....	34
Figure 34. North America Liquid Runway Deicer Consumption and YoY Growth Rate (2019-2024) & (Tons) .....	34
Figure 35. North America Liquid Runway Deicer Consumption Market Share by Country in 2023 .....	35
Figure 36. U.S.A Liquid Runway Deicer Consumption and YoY Growth Rate (2019-2024) & (Tons) .....	35
Figure 37. Canada Liquid Runway Deicer Consumption (Tons) and YoY Growth Rate (2019-2024) .....	36
Figure 38. Europe Liquid Runway Deicer Consumption and YoY Growth Rate (2019-2024) & (Tons) .....	36
Figure 39. Europe Liquid Runway Deicer Consumption Market Share by Country in 2023 .....	37
Figure 40. Germany Liquid Runway Deicer Consumption and YoY Growth Rate (2019-2024) & (Tons) .....	38
Figure 41. France Liquid Runway Deicer Consumption and YoY Growth Rate (2019-2024) & (Tons) .....	38
Figure 42. U.K. Liquid Runway Deicer Consumption and YoY Growth Rate (2019-2024) & (Tons) .....	38

Figure 43. Italy Liquid Runway Deicer Consumption and YoY Growth Rate (2019-2024) & (Tons) .....	38
Figure 44. Russia Liquid Runway Deicer Consumption and YoY Growth Rate (2019-2024) & (Tons).....	38
Figure 45. Asia Pacific Liquid Runway Deicer Consumption and YoY Growth Rate (Tons) .....	39
Figure 46. Asia Pacific Liquid Runway Deicer Consumption Market Share by Region in 2022 .....	39
Figure 47. China Liquid Runway Deicer Consumption and YoY Growth Rate (2019-2024) & (Tons).....	40
Figure 48. Japan Liquid Runway Deicer Consumption and YoY Growth Rate (2019-2024) & (Tons) .....	40
Figure 49. South Korea Liquid Runway Deicer Consumption and YoY Growth Rate (2019-2024) & (Tons) .....	40
Figure 50. Taiwan Liquid Runway Deicer Consumption and YoY Growth Rate (2019-2024) & (Tons).....	40
Figure 51. Southeast Asia Liquid Runway Deicer Consumption and YoY Growth Rate (2019-2024) & (Tons) .....	41
Figure 52. India Liquid Runway Deicer Consumption and YoY Growth Rate (2019-2024) & (Tons).....	41
Figure 53. Vietnam Liquid Runway Deicer Consumption and YoY Growth Rate (2019-2024) & (Tons) .....	41
Figure 54. Australia Liquid Runway Deicer Consumption and YoY Growth Rate (2019-2024) & (Tons).....	41
Figure 55. South America Liquid Runway Deicer Consumption and YoY Growth Rate (Tons) .....	41
Figure 56. South America Liquid Runway Deicer Consumption Market Share by Country in 2023 .....	42
Figure 57. Mexico Liquid Runway Deicer Consumption and YoY Growth Rate (2019-2024) & (Tons) .....	42
Figure 58. Brazil Liquid Runway Deicer Consumption and YoY Growth Rate (2019-2024) & (Tons) .....	42
Figure 59. Middle East & Africa Liquid Runway Deicer Consumption and YoY Growth Rate (Tons) .....	42
Figure 60. Middle East & Africa Liquid Runway Deicer Consumption Market Share by Country in 2023 .....	42
Figure 61. Turkey Liquid Runway Deicer Consumption and YoY Growth Rate (2019-2024) & (Tons) .....	43
Figure 62. Israel Liquid Runway Deicer Consumption and YoY Growth Rate (2019-2024) & (Tons) .....	43
Figure 63. Saudi Arabia Liquid Runway Deicer Consumption and YoY Growth Rate (2019-2024) & (Tons).....	43
Figure 64. UAE Liquid Runway Deicer Consumption and YoY Growth Rate (2019-2024) & (Tons) .....	43
Figure 65. Rest of Middle East & Africa Liquid Runway Deicer Consumption and YoY Growth Rate (2019-2024) & (Tons).....	43
Figure 66. Production Market Share of Liquid Runway Deicer by Type (2019-2024).....	44
Figure 67. Production Market Share of Liquid Runway Deicer by Type in 2023 .....	44
Figure 68. Revenue Share of Liquid Runway Deicer by Type (2019-2024).....	45
Figure 69. Revenue Market Share of Liquid Runway Deicer by Type in 2023 .....	45
Figure 70. Production Market Share of Liquid Runway Deicer by Application (2019-2024) .....	46
Figure 71. Production Market Share of Liquid Runway Deicer by Application in 2023.....	46
Figure 72. Revenue Share of Liquid Runway Deicer by Application (2019-2024) .....	47
Figure 73. Revenue Market Share of Liquid Runway Deicer by Application in 2023 .....	47
Figure 74. Production Market Share of Liquid Runway Deicer by End-Use (2019-2024).....	48
Figure 75. Production Market Share of Liquid Runway Deicer by End-Use in 2023 .....	48
Figure 76. Revenue Share of Liquid Runway Deicer by End-Use (2019-2024) .....	49
Figure 77. Revenue Market Share of Liquid Runway Deicer by End-Use in 2023 .....	49
Figure 78. Manufacturing Cost Structure of Liquid Runway Deicer .....	74
Figure 79. Manufacturing Process Analysis of Liquid Runway Deicer .....	75
Figure 80. Liquid Runway Deicer Industrial Chain Analysis .....	76
Figure 81. Channels of Distribution .....	77
Figure 82. Distributors Profiles.....	78
Figure 83. Global Liquid Runway Deicer Production Market Share Forecast by Region (2024-2030) .....	82
Figure 84. North America Liquid Runway Deicer Production (Tons) YoY Growth Rate Forecast (2024-2030) .....	83
Figure 85. Europe Liquid Runway Deicer Production (Tons) YoY Growth Rate Forecast (2024-2030) .....	83
Figure 86. Asia-Pacific Liquid Runway Deicer Production (Tons) YoY Growth Rate Forecast (2024-2030).....	83



Figure 87. South America Liquid Runway Deicer Production (Tons) YoY Growth Rate Forecast (2024-2030) .....	84
Figure 88. Middle East & Africa Liquid Runway Deicer Production (Tons) YoY Growth Rate Forecast (2024-2030) .....	84
Figure 89. Global Forecasted Demand Analysis of Liquid Runway Deicer (2019-2030) & (Tons) .....	85
Figure 90. Global Liquid Runway Deicer Production Market Share Forecast by Type (2024-2030) .....	88
Figure 91. Global Liquid Runway Deicer Revenue Market Share Forecast by Type (2024-2030) .....	88
Figure 92. Global Liquid Runway Deicer Production Market Share Forecast by Application (2024-2030) .....	89
Figure 93. Global Liquid Runway Deicer Revenue Market Share Forecast by Application (2024-2030) .....	90
Figure 94. Global Liquid Runway Deicer Production Market Share Forecast by End-Use (2024-2030) .....	90
Figure 95. Global Liquid Runway Deicer Revenue Market Share Forecast by End-Use (2024-2030) .....	91
Figure 96. Global Liquid Runway Deicer Production Market Share Forecast by Sub-typ2 (2024-2030) .....	92
Figure 97. Global Liquid Runway Deicer Revenue Market Share Forecast by Sub-typ2 (2024-2030) .....	92
Figure 98. Bottom-up and Top-down Approaches for This Report .....	96
Figure 99. Data Triangulation .....	97