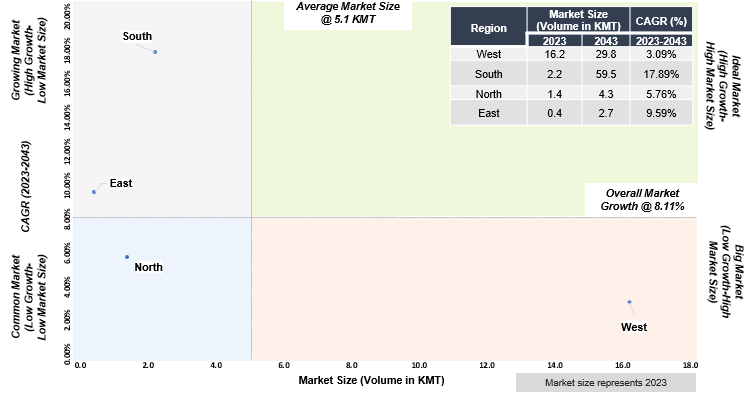
**Strategic Recommendation**

**India Glacial Acrylic Acid Market, Market Potential, By Region, Market Size (Volume in KMT) & Growth Rate (%)**



*Source: TechSci Research*

|  |  |  |  |
| --- | --- | --- | --- |
| **Region** | **Market Size Volume in (KMT)** | | **CAGR (%)** |
| **FY2023** | **FY2043** | **FY2023-FY2043** |
| West | 16.2 | 29.8 | 3.09 |
| South | 2.2 | 59.5 | 17.89 |
| North | 1.4 | 4.3 | 5.76 |
| East | 0.4 | 2.7 | 9.59 |
| ***Total*** | ***20.3*** | ***96.3*** | ***8.11*** |

In the India glacial acrylic acid market, of all the region, south and east region is the growing market, as it has the forecasted CAGR(FY2023-FY2043) of 17.89% and 9.59% respectively which is higher than the overall market forecast CAGR of 8.11%.

The western region is the big market where the market size is 16.2 KMT in FY 2023 which is higher than the overall market size 5.1 KMT although the market is shaping in South India with relatively high growth, primarily because of the anticipated demand for the SAP.

**India Glacial Acrylic Acid Market, Market Potential, By End Use, Market Size (Volume in KMT) & Growth Rate (%)**

A screenshot of a computer screen

Description automatically generated

In the India glacial acrylic acid market, of all the end user, the water treatment industry and detergent industry is the big market where the market size is 10.2 KMT and 5.3 KMT in FY 2023 which is higher than the overall market size 4.1 KMT.

The super absorbent polymer industry is the growing market, as it has the forecasted CAGR(FY2023-FY2043) of 36.83% which is higher than the overall market forecast CAGR of 8.11%.

|  |  |  |  |
| --- | --- | --- | --- |
| **Region** | **Market Size Volume in (KMT)** | | **CAGR (%)** |
| **FY2023** | **FY2043** | **FY2023-FY2043** |
| Super Absorbent Polymer | 0.1 | 54.0 | 36.83 |
| Water Treatment | 10.2 | 19.7 | 3.35 |
| Detergent | 5.3 | 10.1 | 3.28 |
| Paper | 2.8 | 7.0 | 4.69 |
| Others | 1.8 | 5.5 | 5.60 |
| ***Total*** | ***20.3*** | ***96.3*** | ***8.11*** |

**India Ester Acrylic Acid Market**, Market Potential, By Region, Market Size (Volume in KMT) & Growth Rate (%)

A screenshot of a graph

Description automatically generated

In the India ester acrylic acid market, of all the region, south region is the ideal market, as it has the forecasted CAGR(FY2023-FY2043) of 5.73% which is higher than the overall market forecast CAGR of 4.57%.

The west region is the big market where the market size is 35.6 KMT in FY 2023 which is higher than the overall market size 17.3 KMT.

|  |  |  |  |
| --- | --- | --- | --- |
| **Region** | **Market Size Volume in (KMT)** | | **CAGR (%)** |
| **FY2023** | **FY2043** | **FY2023-FY2043** |
| West | 35.6 | 79.4 | 4.09 |
| South | 19.7 | 60.0 | 5.73 |
| North | 10.2 | 21.8 | 3.86 |
| East | 3.7 | 7.8 | 3.83 |
| ***Total*** | ***69.2*** | ***169.0*** | ***4.57*** |

**India Ester Acrylic Acid Market**, Market Potential, By End Use, Market Size (Volume in KMT) & Growth Rate (%)

A screenshot of a graph

Description automatically generated

In the India ester acrylic acid market, of all the end user, the automobile and textile industry is the ideal market as the market size is 17.3 KMT and 23 KMT in FY 2023 respectively which is higher than the overall market size 13.8 KMT, and forecasted CAGR of (FY2023-FY2043) 5.22% and 4.87% respectively which is higher than the overall market forecast CAGR of 4.57%.

|  |  |  |  |
| --- | --- | --- | --- |
| **End Use** | **Market Size Volume in (KMT)** | | **CAGR (%)** |
| **FY2023** | **FY2043** | **FY2023-FY2043** |
| Textile | 23.0 | 59.6 | 4.87 |
| Automobile | 17.3 | 47.9 | 5.22 |
| Plastics | 14.4 | 29.7 | 3.70 |
| Dispersion | 11.1 | 25.3 | 4.22 |
| Others | 3.4 | 6.5 | *3.22* |
| ***Total*** | **69.2** | **169.0** | *4.57* |

**Price Mechanism and Reference Points**

**Competitiveness with Importing Source Countries, Be Considered as per Example Below**

|  |  |  |  |
| --- | --- | --- | --- |
| I | A | CIF Price | 100000 |
| B | Basic Customs Duty (7.5% of A (CIF price)) | 7500 |
| C | Customs AIDC (7.5% of B (Basic Customs Duty)) | 563 |
| D | Total Custom Duty on CIF price (B+C) | 8063 |
|  | Other Duties |  |
| E | Social Welfare Surcharge (10% of D (Total Custom Duty on CIF price)) | 806 |
| F | Total Duties Incurred (D+E) | 8869 |
| G | IGST Levy (18% of A (CIF Price)) | 18000 |
| H | Total Tax Levied on CIF Price (G+H) | 26869 |
| I | Landed Price (H+A) | 126869 |
| II |  | Distance Between Sauce and Destination in Kms | 1000 |
|  | Average Logistic Cost Per KM | 3.8 |
|  | Logistic Cost | 3800 |
| I+II |  | Total Delivered Cost | 130669 |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Country** | **Basic Custom Duty** | **Customs AIDC** | **Social Welfare Surcharge (SWC)** | **IGST Levy** | **Total Duty** | **Spec Duty** |
| **Antidumping Duty (ADD)** |
| Russia | 7.50% | 7.50% | 10% | 18% | 28.46% | - |
| Malaysia | 7.50% | 7.50% | 10% | 18% | 28.46% | - |
| Indonesia | 7.50% | 7.50% | 10% | 18% | 28.46% | - |
| Japan | 7.50% | 7.50% | 10% | 18% | 28.46% | - |
| South Korea | 7.50% | 7.50% | 10% | 18% | 28.46% | 381.93 |
| China | 7.50% | 7.50% | 10% | 18% | 28.46% | 465.94 |
|  |  |  |  |  |  |  |
| **Country** | **Basic Custom Duty** | **Customs AIDC** | **Social Welfare Surcharge (SWC)** | **Spec Duty Antidumping Duty (ADD)** | **IGST Levy** | **Total Duty** |
|  |
|  |
| Russia | 7500 | 562.5 | 806.25 | - | 19596 | 28465 |  |
| Malaysia | 7500 | 562.5 | 806.25 | - | 19596 | 28465 |  |
| Indonesia | 7500 | 562.5 | 806.25 | - | 19596 | 28465 |  |
| Japan | 7500 | 562.5 | 806.25 | - | 19596 | 28465 |  |
| South Korea | 7500 | 562.5 | 806.25 | 38193 | 26471 | 73533 |  |
| China | 7500 | 562.5 | 806.25 | 46594 | 46594 | 83446 |  |

**Realistic Ester Acrylic Acid Delivered Price- Region wise (INR/Ton)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | West | South | North | East |
| **FY2013** | 1,29,508 | 1,29,519 | 1,29,887 | 1,30,025 |
| **FY2014** | 1,44,686 | 1,44,705 | 1,45,129 | 1,45,294 |
| **FY2015** | 1,30,542 | 1,30,552 | 1,30,901 | 1,30,992 |
| **FY2016** | 86,564 | 86,578 | 86,937 | 87,056 |
| **FY2017** | 85,657 | 85,731 | 86,099 | 86,216 |
| **FY2018** | 1,04,614 | 1,04,655 | 1,05,162 | 1,05,253 |
| **FY2019** | 1,16,043 | 1,16,134 | 1,16,586 | 1,16,705 |
| **FY2020** | 1,03,220 | 1,03,270 | 1,03,857 | 1,04,023 |
| **FY2021** | 1,04,250 | 1,04,344 | 1,04,940 | 1,05,052 |
| **FY2022** | 1,89,839 | 1,89,886 | 1,90,534 | 1,90,752 |
| **FY2023** | 1,66,995 | 1,67,069 | 1,67,685 | 1,67,830 |
| **FY2028F** | 2,06,674 | 2,06,811 | 2,07,354 | 2,07,603 |
| **FY2033F** | 2,47,455 | 2,47,654 | 2,48,320 | 2,48,650 |
| **FY2038F** | 2,86,608 | 2,86,879 | 2,87,673 | 2,88,097 |
| **FY2043F** | 3,24,168 | 3,24,448 | 3,25,342 | 3,25,913 |
| **FY2048F** | 3,54,513 | 3,54,778 | 3,55,666 | 3,56,491 |

**Realistic Glacial Acrylic Acid Delivered Price- Region wise (INR/Ton)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | West | South | North | East |
| **FY2013** | 1,35,677 | 1,35,688 | 1,36,056 | 1,36,194 |
| **FY2014** | 1,52,375 | 1,52,393 | 1,52,817 | 1,52,982 |
| **FY2015** | 1,36,909 | 1,36,919 | 1,37,268 | 1,37,359 |
| **FY2016** | 89,963 | 89,977 | 90,336 | 90,455 |
| **FY2017** | 89,253 | 89,328 | 89,695 | 89,812 |
| **FY2018** | 1,10,044 | 1,10,084 | 1,10,591 | 1,10,682 |
| **FY2019** | 1,23,148 | 1,23,238 | 1,23,690 | 1,23,810 |
| **FY2020** | 1,08,855 | 1,08,905 | 1,09,493 | 1,09,658 |
| **FY2021** | 1,04,920 | 1,05,015 | 1,05,610 | 1,05,722 |
| **FY2022** | 2,16,157 | 2,16,203 | 2,16,852 | 2,17,069 |
| **FY2023** | 1,75,916 | 1,75,990 | 1,76,606 | 1,76,751 |
| **FY2028F** | 2,14,711 | 2,14,849 | 2,15,392 | 2,15,640 |
| **FY2033F** | 2,77,019 | 2,77,217 | 2,77,884 | 2,78,214 |
| **FY2038F** | 3,30,116 | 3,30,387 | 3,31,181 | 3,31,605 |
| **FY2043F** | 3,84,203 | 3,84,483 | 3,85,377 | 3,85,948 |
| **FY2048F** | 4,22,172 | 4,22,436 | 4,23,324 | 4,24,150 |

**Key Product Specifications to Benchmark Against Competition**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Glacial Acrylic Acid** | | | | | |
| **Key Specifications** | **BASF** | **ARKEMA** | **Dow Jones Chemicals** | **Nippon Shokubai** | **LG Chem** |
| Glacial Acrylic acid | Min 99.5% | Min 99.5% | 99.74% | 99.8 | 99.8 |
| Water | 0.10% | 0.10% | 0.1% Max | 0.12% | 0.02% |
| MEHQ inhibitor | 200 ± 20 ppm | 200 ± 20 ppm | 200 ± 20 ppm | 195 PPM | 203 |
| Diacrylic acid (dimer) | 2000 ppm Max | 2000 ppm Max | 300 PPM | 1100 PPM |  |
| Color (APHA) | 20 Max | 10 Max | 4 | 5 | 5.0 max |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Ester Acrylic Acid** | | | | | |
| **Key Specifications** | **BASF** | **ARKEMA** | **Dow Jones Chemicals** | **Nippon Shokubai** | **LG Chem** |
| Ester Acrylic acid | 99.00%min | 99.5% min | 99.5% min | 99.5% min | 99.50% |
| Water | 0.20% Max | 0.10% | 0.2% max | 0.09% | 0.05% |
| MEHQ inhibitor | 200 ± 20 ppm | 200 ± 20 ppm | 200 ± 20 ppm | 200 ± 20 ppm | 200 ± 20 ppm |
| Diacrylic acid (dimer) | NA | 2000 ppm maximum | NA | NA | NA |
| Color (APHA) | 10 max | 10 max | 20 max | 10 | 10 max |

**Key Consumers to be targeted.**

**Glacial Acrylic Acid Customers: Region-Wise**

|  |  |
| --- | --- |
| **Region** | **Key Customers** |
| West | Snf Flopam India Private Ltd., Shiva Performance Materials Private Ltd., Gujarat Polysol Chemicals Pvt.Ltd, , Sika India Private Ltd., Lupitite Polymer Industries., Kemit Chemical Pvt.Ltd., Viswaat Chemicals Ltd., Tide Industries, Corel Pharma Chem, Pidilite Industries Ltd., Rossari Biotech Ltd., Indofil Chemicals Company (A Div.Of Indofil Organic, Yahska Ploymers Pvt. Ltd., Shakti Chemicals, Alchemy, Chemical, Dai-Ichi Karkaria Ltd., Paradise Chemical Industries, Anshika Polysurf Ltd., Yasho Industries Pvt.Ltd., Finor Piplaj Chemicals Pvt. Ltd., Jesons Techno Polymers Llp. |
| North | Pidilite Industries Ltd., C & E LTD. |
| South | SNF India Pvt. Ltd., Sika India Private Ltd., Pidilite Industries Ltd., Aezis Global Private Ltd, Aquapharm Chemicals Pvt.Ltd., Fineotex Chemical Ltd., Rossari Biotech Ltd., RSD Polymers Pvt Ltd., Nasense Labs Pvt Ltd., Ion Exchange (India)Ltd.. Indofil Chemicals Company(A Div.Of Indofil Organic, Supercon Chemicals Pvt. Ltd., Paresh Chemical Corporation, Hebbar Chemicals Pvt.Ltd., Soham Polymers Pvt.Ltd., G.G.Organics Private Ltd., |
| East | Sika India Private Ltd. |

**Ester Acrylic Acid Customers: Region-Wise**

|  |  |
| --- | --- |
| **Region** | **Key Customers** |
| West | Shiva Performance Materials Private Limited, Hubergroup India Private Limited, Gujarat Polysol Chemicals Pvt.Ltd., Apcotex Industries Ltd., Himadri Speciality Chemical Ltd., Kemit Chemical Pvt Ltd., Chryso India Private Limited, Visen Industries Limited, BASF India Limited, Finor Piplaj Chemicals Ltd., PIDILITE Industries Limited, Prism Johnson Limited, Yahska Ploymers Pvt Ltd., CYNOR Laboratories, NOORI Plastic Industries, Apar Industries Ltd., Indigo Paints Ltd, Jesons Industries Limited |
| North | Visen Industries Limited, PIDILITE Industries Limited, Kansai Nerolac Paints Limited, Berger Paints India Limited, Shalimar Paints Ltd., |
| South | Rossari Biotech Ltd., Fineotex Chemical Ltd, Aezis Global Private Limited, Apcotex Industries Ltd., Chryso India Private Limited, Visen Industries Limited, Visen Industries Limited, BASF India Limited, RSD Polymers Pvt Ltd, PIDILITE Industries Limited, MYK Arment Private Limited, Hetero Drugs Ltd., A. B. Enterprises, Sudarshan Chemicals Ind Ltd, Labdhi Chemicals, Pure Chemicals Co., Pidilite Industries Limited, Kansai Nerolac Paints Limited, , Berger Paints India Limited, Nippon Paint (India) Private Limited, Akzonobel India Ltd, 3M India Ltd, SIRCA Paints India Ltd, INDIGO Paints Ltd, H B Fuller India Adhesives Private Limited, Tex Year Industrial Adhesives Pvt Ltd, Reena Organics Private Limited |
| East | Himadri Speciality Chemical Ltd., PIDILITE Industries Limited, Berger Paints India Limited |

|  |  |  |
| --- | --- | --- |
| Shift in Contribution, FY 2023/ FY 2028 | | |
| Key Focus | **Ester Acrylic Acid** | **Glacial Acrylic Acid** |
| End-Use Industries | **Cumulative Share: 95.1% / 95.5%**  Textile: 33.3%/ 33.9%  Automobile: 25.0%/ 25.7%  Plastics: 20.8%/ 19.9%  Dispersion (Paint & Coatings, Adhesive): 16.0%/ 15.9% | **Cumulative Share: 94.7% / 94.9%**  Super Absorbent Polymer: 0.5%/40.1%  Water Treatment: 50.4%/30.1%  Detergent: 26.2%/15.0%  Paper: 13.8%/8.5% |
| Region | **Cumulative Share: 95.1% / 95.5%**  West India (80%)/ 45.6%  South India (10.9%)/47.9% | **Cumulative Share: 95.1% / 95.5%**  West India: 51.5%/ 50.3%  South India:28.5%/ 29.9%  North India: 14.8%/ 14.8% |
| Exports Market | USA, Bangladesh, UAE, Kenya, Brazil are immediate countries to explore as they have customers from India.  Germany, Belgium, USA, Netherlands, Malaysia, Turkey are heavily importing acrylic acid globally needs attention to explore the export market. | |
| Pricing and Agreements with Institutional buyers | Customized pricing (discounts) based on volume or long-term contracts to incentivize bulk purchases. Offered price should be lesser than the landed price of the imported AA.  Focus should be on Contract Pricing: Establish long-term contracts with customers that outline pricing terms and conditions. | |
| Distribution | -Enrolment of distributors near the major consumption centres of AA such as in west India is must. In addition, BPCL may utilize its existing distributors to cross sell.  -Explore partnerships with distributors, agents, or other complementary companies in the value chain to expand market reach.  Making Technical Sheet and potential customer list available to distributors and in-house marketing department  -Key distributors to be considered are Hetal Chem Impex, Paari Chem Resources LLP., Jaimaruti Polychem LLP. ,Shah C J World LLP., Associated Dye Chem Corporation., Paari Chem Resources LLP., Hetal Chem Impex | |
| Promotion and Reach | -Organize workshops to educate distributors and in-house marketing department about the product (AA)'s features, benefits, and value proposition. Equip them with the necessary knowledge and tools to effectively sell and communicate the product to customers.  -Cluster the existing customers of BPCL by the potential end-users of AA and inform them about the BPCL’s AA product.  -Identify key customers and prospects who would benefit from the new product (non-BPCL customer) such as Aezis Global Private Ltd., Pidilite Industries Ltd. For GAA and Shiva Performance Materials Private Limited, Rossari Biotech Ltd for ester. Engage with them through personalized communication, product demonstrations, and presentations to generate interest and address their specific needs.  - Participation in relevant industry (B2B) trade shows, conferences, and events, in India and abroad, to showcase the new product, network with potential customers, and generate leads. Product should be properly presented and visually appealing at the booth. Few examples of trade fairs: India Chem (India), ChemExpo India (India), ChemTECH World Expo (India), Chemspec Europe (Europe), International Chemical Industry Fair (ICIF) China (China) | |

**Concluding Remarks**

A substantial business opportunity exists, but there will always be tough competition from existing global importers from JNPT and Vizag ports, specifically from those companies with the advantage of having long-term supply agreements and healthy business relationships with institutional buyers in India. The new entrant will influence the existing market and supply dynamics based on competitive prices and specifically differentiated product specifications.

* Favourable Economic Policies and Government Support will continue to create a positive and supporting Ecosystem for the entire Value Chain for a new and single domestic manufacturer over Imports.
* Kochi’s Strategic Location will help BPCL to cater the West and South Indian markets.
* Kochi’s proximity to JNPT and Vizag port will help to access the well-established delivery and Logistics routes/mechanism to cater West and South Indian market. Also, these ports will offer advantages to cater for the export markets.
* The availability of raw materials at lower costs in overseas markets may challenge BPCL to be competitive in the local market.
* Unpredictability in the cost of raw material (propylene) and worldwide economic situations influencing the expense of acrylic acid manufacturing will continue in price fluctuation.
* Lack of suitable Infrastructure, specifically in East India, will be a challenge to cater for all suppliers.
* Growing demand from end-use industries supported with New Investments by existing customers will intensify the competition.
* Strict environmental regulations and compliance requirements may impact the end-user industry buyers' buying pattern.