

POLYURETHANE CHEMICALS AND PRODUCTS IN EUROPE, MIDDLE EAST & AFRICA (EMEA), 2023

IAL Consultants is pleased to announce the recent publication of the 16th edition of its report on the markets for Polyurethane Chemicals and Products in Europe, Middle East and Africa.

This new study updates and expands upon the information included in our previous study published in 2022. The information contained within this report is based upon an extensive programme of interviews throughout the industry. The report contains both PU product production and raw material consumption figures, with 2022 as the base year and market forecasts provided to 2027.

The data is also available separately in a database format for subscribers, enabling the manipulation and output of data.

IAL is continuously striving to improve its products. In the 2023 report, there is further regional segmentation for rigid foam (when applicable), which is now split into:

- PUR
- PIR

This is on top of our further segmentation of flexible slabstock foam into:

- Furniture component foam
- Bedding foam
- Vehicle foam
- Recycled foam

The report is presented in eight volumes. The titles of all eight volumes are:

| Volume 1 – Raw Materials |
|---------------------------------|
| Volume 2 – Flexible Foam |
| Volume 3 – Rigid Foam |
| Volume 4 – Coatings |
| Volume 5 – Adhesives & Sealants |
| Volume 6 – Elastomers |
| Volume 7 – Binders |
| Volume 8 – End-Use Markets |

The market for polyurethanes has experienced several challenging years in the EMEA region. Production declined by 6.4% in 2020 but recovered somewhat in 2021 with 3.1% growth. Economic and political issues, not least the Russia-Ukraine conflict, caused a decline in production in 2022. Overall, output dropped by 5.2% in the EMEA region, and a further decline of 1.7% is anticipated for 2023.

Pre-pandemic production is not expected to be regained until the end of the forecast period, in 2027. Growth rates should return to 2-3% p.a. by 2024, if the situation does not worsen from the time of publication.

Historically, flexible foam has been the largest end-use segment, but due to slow growth rates in recent years, rigid foam is now the largest market for PU products in EMEA. Both product types together represent 66% of the overall market. Binders account for the smallest share of PU production.

The total production of polyurethane products in the EMEA region was 6.09 million tonnes in 2022, representing a decline of 5.2%. There were many contributing factors, including the conflict in Ukraine, energy crisis, high inflation, rising interest rates and weakening confidence. The situation for 2023 remains highly fluid and uncertain.



All regions experienced a decline in 2022, with the exception of the Middle East. The poorest performance came in Eastern Europe, which was predominantly due to the severe fall in production in Russia and the CIS region. The fallout from the Russia-Ukraine conflict also affected Central Europe. The Middle East was by far the best performing region, and it is here that much of the opportunity for further growth resides.

Polyol prices increased in the European market during the first quarter of 2022, supported by strong demand from a variety of downstream industries. The expanding automotive sector increased demand for flexible polyurethane foam, which in turn boosted polyol consumption.

Dampened demand caused polyol prices to decrease through the middle of 2022, and many European producers cut their operating rates amid rising inflation and high energy prices.

The development of renewable polyols will heavily depend on changes in government legislation or subsidies. It will, however, be difficult for producers to stay competitive. Without legislative pressure market penetration will remain limited in the short term.



Flexible Foam

Total EMEA production of polyurethane flexible foam was just over 2 million tonnes in 2022, a decrease of 6.6% compared to the previous year. After a small rebound in 2021, flexible foam production contracted significantly in 2022 amid falling consumer demand for comfort foams, previous overstocking activity, and despite an uptick in automotive production.

The first half of 2022 was fairly positive for flexible foam, but the second half showed a distinct collapse in demand. This was among the worst performances of all PU products in 2022. The technical foam segments did perform somewhat better than the comfort foams.

The flexible foam market in EMEA is relatively mature. Western Europe is the largest producer by some margin, followed by Eastern and then Central Europe, with the latter two regions' furniture industries being very important (notably Poland and Turkey). Africa and the Middle East also produce significant quantities of flexible slabstock since the production process is relatively simple.

2022 was influenced by the impact of the Russia-Ukraine war. High inflation rates and rising interest rates caused a decrease in consumer spending power and confidence. Furthermore, the COVID-19 pandemic had already brought forward many discretionary replacements of consumer items such as mattresses and sofas as people invested in their homes when they were unable to travel or socialise.

Rigid Foam

PU rigid foam production in EMEA declined by 4.7% in 2022 to reach 2.0 million tonnes. Rigid foam was the second largest polyurethane segment in 2022, just behind flexible foam. The decline in rigid foam production in 2022 was not as steep as flexible foam, elastomers or binders.

Western Europe accounts for the largest share of rigid foam production in the region, followed by Eastern Europe. Africa is the smallest producing region.

By sub-region, there was growth in the Middle East and Africa in 2022, thanks to their buoyant construction sectors, but declines elsewhere. The drop was particularly significant in Eastern Europe due to the poor situation in Russia and Ukraine.

The construction sector covers over 80% of PU rigid foam used in the EMEA region, with additional demand coming from the cold chain and refrigeration industries. By product type, the single largest category is rigid-faced panels, followed by flexible-faced panels, refrigeration foam and OCF. All categories saw a decline in 2022, but SPF and refrigeration foam fared better than the other products.

CASE Applications

The EMEA region produced 859,000 tonnes of polyurethane coatings in 2022, representing a decrease of 2.9% compared to the previous year. The industry rebounded a little in 2021 after the effects of the pandemic subsided, but 2022 was another difficult year. Despite the decline, however, the industry performed somewhat better than the foam categories.

The biggest end-use categories in the region for PU coatings are wood and furniture coatings, industrial coatings, and maintenance coatings. Transport is also a large sector if all uses, such as auto OEM, auto refinish, commercial vehicle and marine coatings, are taken together. The coatings market for automotive applications experienced growth in 2022 after several difficult years.

The EMEA region produced 414,000 tonnes of polyurethane adhesives and sealants in 2022, representing a decline of 2.4% compared to the previous year. Adhesives represent 74% of production, and sealants for the remaining 26%. Although production declined, the segment fared somewhat better than the foam products.

Flexible packaging adhesives represent the largest product category within PU adhesives and sealants, accounting for ~31% of production, followed by construction adhesives with 26%. All other categories have less than 10% share of production.

The best performing categories in 2022 were auto direct glazing sealants, automotive sealants and transport sealants. This was because the automotive industry started to pick up momentum after several very difficult years.

Production of polyurethane elastomers in the EMEA region stood at approximately 579,000 tonnes in 2022, which reflects a decrease of 6% compared to 2021. The market is expected to decline again in 2023, albeit at a slower rate, then pick up again from 2024 onwards. There was a decline in all segments in 2022 with the exception of technical microcellular elastomers, which benefitted from the uptick in the automotive sector.

Footwear elastomers represent by far the largest end-use segment, at 210,000 tonnes of production, followed by TPU and cast elastomers. Germany, Turkey and Italy are the countries with the highest production output in EMEA

Binders

Production of polyurethane binders in the EMEA region declined by 7.5% in 2022 after a modest growth in 2021. There were double-digit declines in Central and Eastern Europe as the Russia-Ukraine conflict caused supply chain uncertainties and weakened consumer confidence. Africa was static, and there was growth in the Middle East to match the growing construction activity.

The largest product segment is forest product binders, which are used to produce woodbased panels such as OSB. Smaller quantities are produced for rubber crumb, foundry core and assorted other binder applications.

The greatest decline in 2022 was in forest product binders, as a lot of these are produced in Russia. Potential restrictions on the use of urea formaldehyde binders may propel demand in future years.

The data in this eight-volume report include raw material consumption by product type, by region, by country and by major end-use industry. The Raw Materials volume contains comprehensive supply and demand data for all the major polyurethane raw material types. The Major End-Use Markets volume contains an overview of the major markets for PU products and a summary of trends and drivers.

The report is available for the following prices:

| | Price |
|--------------------------------------|---------------------------------|
| Volume 1 - Raw Materials | Only available with full report |
| Volume 2 - Flexible Foam | € 5,100 |
| Volume 3 - Rigid Foam | € 5,100 |
| Volume 4 - Coatings | € 3,800 |
| Volume 5 - Adhesives & Sealants | € 2,700 |
| Volume 6 - Elastomers | € 3,800 |
| Volume 7 - Binders | € 1,500 |
| Volume 8 - Major End-Use Markets | € 5,100 |
| COMPLETE REPORT WITH DATABASE ACCESS | € 17,500 |

For more details, please contact:

Mrs Cathy Galbraith IAL Consultants CP House, 97-107 Uxbridge Road Ealing London W5 5TL Telephone: +44 (0) 20 88 32 77 80 Fax: +44 (0) 20 85 66 49 31 Email: cgalbraith@brggroup.com

Or visit our website: www.ialconsultants.com