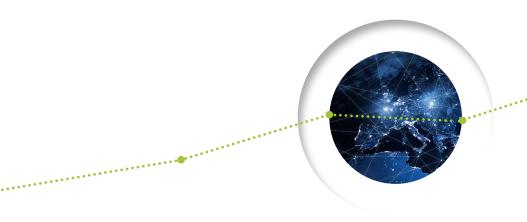
The European Adhesive and Sealant Industry

Facts & Figures 2020





World adhesive and sealant sales	04
Europe's share of the global adhesive and sealant industry	06
European adhesive and sealant market evolution	08
Sales in Europe by country	10
Adhesive and sealant end-use sectors	12
Adhesive and sealant formulation technologies	14
Adhesive and sealant producers in Europe	16
R&D spending	18
Employment	20
COVID-19 Impact	22

Facts & Figures 2020

Although adhesives and sealants play an essential role in a huge range of consumer, professional and industrial products, they are largely invisible once applied. As a result, there is little awareness of the adhesive and sealant industry and the benefits it brings.

The aim of FEICA's 2020 Facts & Figures is to provide a concise overview of the European adhesive and sealant industry. This specialty chemical sector, which represents about 2% of the total European chemical industry's turnover, contributes more than 17 billion euros to the EU economy and employs more than 45,000 people.

Adhesives and sealants: a history of innovation

The first use of bonding technology by humans can be dated to around 200,000 B.C., when birch-bark-tar was used to glue stone arrowheads to a shaft. Subsequently, humans used a range of natural materials – such as blood and animal protein, fish, resins from trees, natural rubber and milk protein – as bases for adhesives and sealants. Towards the end of the 19th Century, synthetic materials began to be used, spawning many more innovative adhesives and sealants.

A dynamic and successful industry

Today, the European adhesive and sealant industry is a success story that makes many everyday products possible, contributes to the economy, fosters sustainable development, encourages innovation and offers stimulating careers for people with a wide range of skills. COVID-19 will have a mixed impact on the industry, stimulating growth in sectors such as paper, board and DIY. However, it will negatively affect the transportation and building/construction segments.

World adhesive and sealant sales

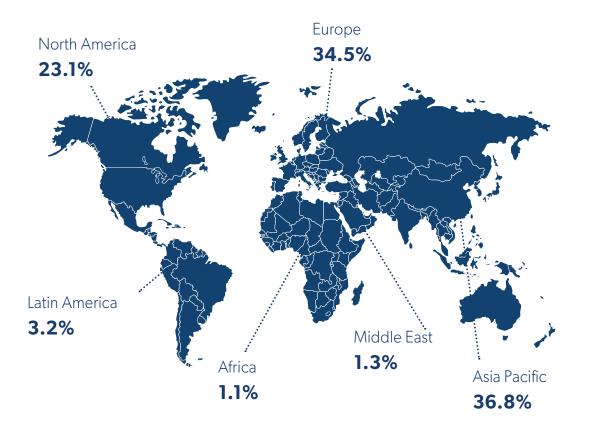
The global market for adhesives and sealants reached a value of 50 billion euros in 2020, with Europe holding a share of almost 35%. Other regions such as Asia-Pacific are taking a growing share of the market due to booming economies.

Europe	€17,100 mn
Asia Pacific	€18,200 mn
North America	€11,400 mn
Latin America	€1,600 mn
Middle East	€600 mn
Africa	€500 mn



The world adhesive and sealant market 2020 (share)

€50bn



• FEICA defines the European market as the 27 countries of the EU plus the rest of Western Europe, selected countries in Central and Eastern Europe, and Turkey.

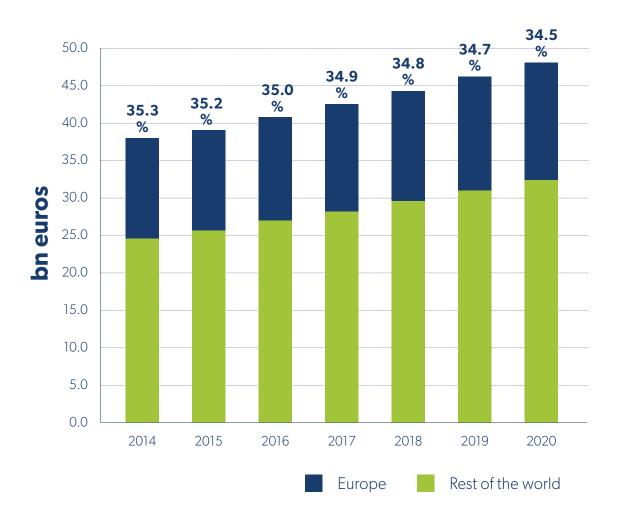
Data source: Smithers, ASC, FEICA

Europe's share of the global adhesive and sealant industry

The European market has grown by a CAGR of 4.1% during the 2014-2020 time period, with Asia also growing. As a result, Europe's share of the global market has decreased from about 35.2% in 2014 to 34.5% in 2020.



The world adhesive and sealant market 2020 (share)



European adhesive and sealant industry market evolution

In 2014, the adhesive and sealant market had finally recovered from the 2008 economic crisis. From then there has been front of steady growth in the European market. It is currently worth more than 17 billion euros. However, COVID-19 is likely to have an impact on the market value in 2020, with certain industries being more affected than others.



The European adhesive and sealant market 2014-2020 (bn €)



Data source: CHEM Research GmbH and Smithers

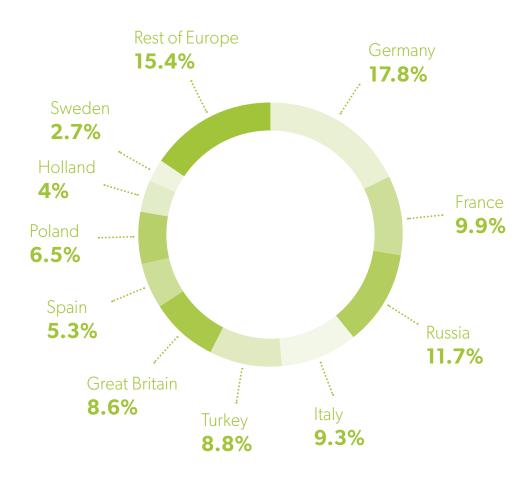
Sales in Europe by country

Currency fluctuations will have an impact on the precise value definitions. However, it is clear that Germany is the largest market for adhesives and sealants in Europe. The top ten countries account for 70% of European demand, while the top six countries share more than 60% of the demand. Above-average per capita consumption of adhesives and sealants is expected for the period 2014–2020 by Germany, France and Finland. Higher demand in those markets can be attributed to the higher industrial output of goods that are exported (e.g. general assembly and packaging products).



The European adhesive and sealant market 2020 Top ten countries

€17.1bn



Adhesive and sealant end-use sectors

Adhesives and sealants are advanced formulated products that play an essential role in thousands of everyday items. From your mobile phone to your car; your washing machine to your shoes; the construction and weather-proofing of your house to your toilet tissue; all of these items and many more rely on adhesives and sealants.

Not only do they make these products possible, in many cases they also enable manufacturers to produce them in a more cost-effective and environmentally-responsible manner.

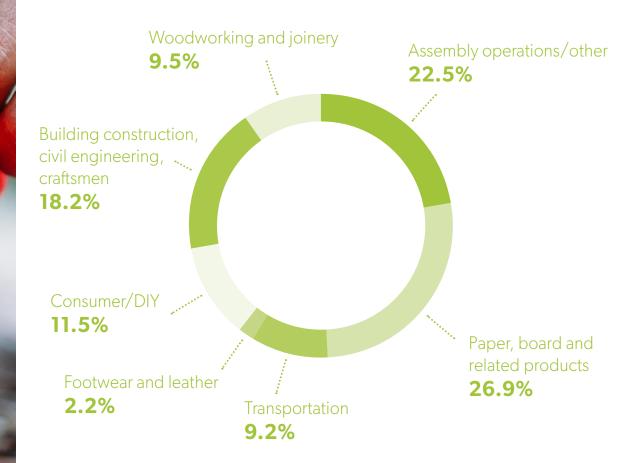
In terms of value, the major end-use sectors for adhesives and sealants in Europe are building and construction, paper and board, industrial assembly and transportation. At least half of the products are used in industrial applications.

The rising popularity of e-commerce has led to strong demand in the paper and board end-use segment. Issues of sustainability continue to be a major influence on adhesive and sealant demand. Building is a significant segment but is likely to be negatively impacted by COVID-19 in 2020. However, there is growing demand for (more) eco-responsible materials, thanks to an increasing focus in building/construction on energy efficiency, retention and sustainable energy generation. There is also more demand for fire-retardant adhesive and sealant. The assembly operations segment continues to grow because of the automation/digitalisation trend.



The European adhesive and sealant market 2020 End-use sectors

€17.1bn



Adhesive and sealant formulation technologies

Adhesives and sealants are based on a range of natural and synthetic raw materials. In Europe, reactive systems represent more than 50% of the market by value. This is partly because they are well represented in both adhesive and sealant products, and also because they are relatively high value products.

Waterborne products represent more than a quarter of the market. The use of solvent-borne adhesives has been steadily declining as the industry continues with its commitment to move to safer, more environmentally-responsible technologies wherever possible. They now only represent 10% of the market.

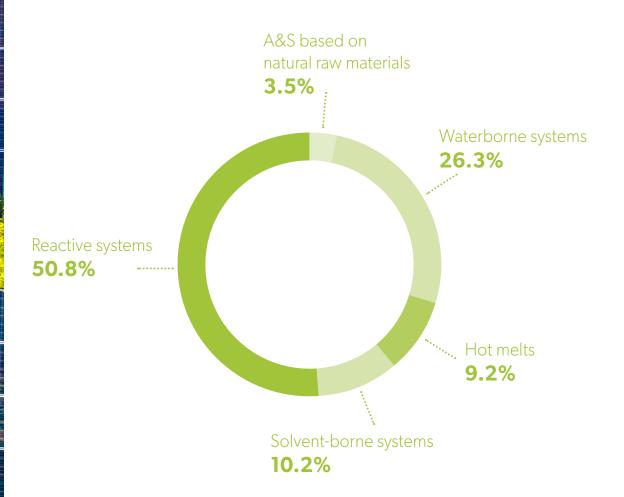
The number of different product formulations used varies according to the market sector. In total, it is estimated that over 15,000 standard adhesive and sealant formulations are in use in Europe, based on five formulation technology platforms and serving more than 100 well-defined end-uses. In addition to standard products, many more formulations have been and continue to be developed to satisfy the demand for customised products in specialty applications.

Further development in reactive polymer-based technology led to adhesive and sealant products with improved technical properties. In the coming years there will be a greater focus on decreasing dependence on fossil-based raw materials and increased demand for safe, sustainable adhesive and sealant products, where price and quality remain key.



The European adhesive and sealant market 2020 Formulation technologies

€17.1bn



Data source: 2012 ASC-CATIA-FEICA Adhesives and Sealants Classification Manual, Smithers

Adhesive and sealant producers in Europe

There are about 450 adhesive and sealant companies in Europe manufacturing at some 700 sites. They can be classified as follows:

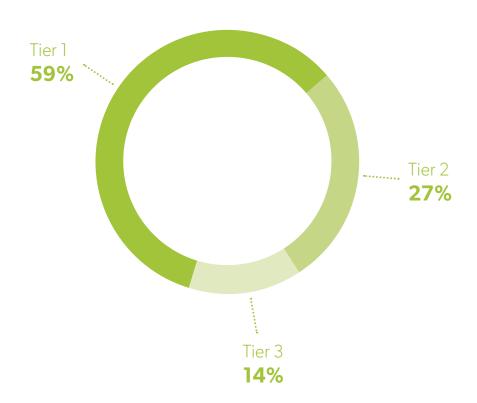
- Tier 1 companies: The top 10, with annual sales above 200 million euros.
- Tier 2 companies: About 50 manufacturers with annual sales in the range 20 200 million euros.
- Tier 3 companies: Several hundred SMEs with annual sales in the range 2 20 million euros.

The top 10 have a 59% share of the European market. Tier 2 companies have a 27% share, while the numerous Tier 3 companies have 14% of the market. This means that the top 60 companies account for about 86% of adhesive and sealant sales in Europe.



European suppliers of adhesives and sealants 2020 Manufacturers' Sales Value

€17.1bn



R&D spending

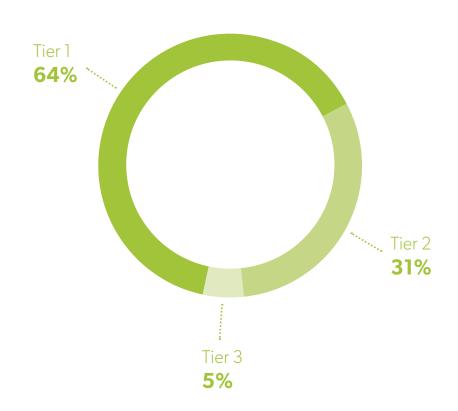
About 470 million euros were spent on research and development (R&D) in 2019. Adhesive and sealant companies spend on average 2-3% of sales on R&D, which is higher than the chemical industry on average.

Adhesive and sealant manufacturers who develop and manufacture more technologically advanced products tend to spend 5-6% of sales, whereas those involved in simpler products can spend less than 1%. The 60 Tier 1 and Tier 2 companies accounted for at least 90% of the R&D spend.



European adhesive and sealant industry 2020 R&D spending

€470mn



Employment

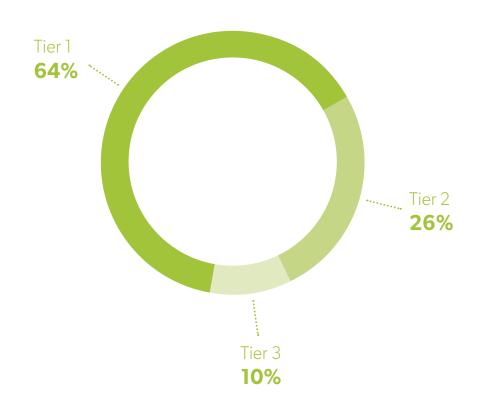
It is estimated that the European adhesive and sealant industry employs more than 45,000 people. Approximately 29,000 are employed in the top 10 manufacturers, 11,000 in Tier 2 companies and 4,500 in Tier 3 companies. There have been a number of mergers and acquisitions in the past 5 years that have meant to led to a consolidation of employees in the Tier 1 and Tier 2 companies.

Together, Tier 1 and 2 companies provide about 90% of the employment opportunities. The industry offers stimulating careers for people with a wide range of skills. In addition, scientific innovation in the sector provides a rich source of new possibilities for Europe's manufacturing companies.



European adhesive and sealant industry 2020 Employment

ca. 45,000 employees



COVID-19 Impact

Although there may be a negative impact following the lockdown in the various countries in Europe as well as in the rest of the world, the general consensus still seems to be that the recovery will be relatively quick.

Industry associations

The adhesive and sealant market is highly fragmented since every different bonding and sealing operation effectively represents an end use. In order to establish common definitions for worldwide reference, the industry's associations - FEICA, ASC (the Adhesive and Sealant Council, Inc., in the USA) and CATIA (the China Adhesives and Tape Industry Association) - have jointly developed a harmonised classification of adhesives and sealants.

Download your free copy of the Adhesive & Sealant Classification Manual **www.feica.eu/information-center**

FEICA's vision for sustainable development

'The adhesive and sealant industry is committed to enabling a growing population to live a better life and to use the planet's resources responsibly and efficiently'.



FEICA

FEICA, the Association of the European Adhesives and Sealants Industry, represents the industry at a European level and works with all relevant stakeholders to create a mutually beneficial economic and legislative environment within which they can operate and prosper.

Our industry provides leading edge technologies that make the manufacture and supply of many everyday products possible; it contributes greatly to the European and global economy, fosters sustainable development, encourages innovation and offers stimulating careers for people with a wide range of skills.

FEICA Mission Statement

FEICA is a member-oriented, value-driven organisation representing the European adhesive and sealant sector.

FEICA is committed to continuous improvement in its efficiency and effectiveness, and ensures a vigorous industry by:

- Engaging with legislators and providing guidance to the industry on EU regulatory affairs and the safe use of our products.
- Fostering sustainable development within the industry.
- Providing advocacy and a platform for industry dialogue and knowledge sharing.

For more information, visit www.feica.eu



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