Turkey

Turkish Chemical Manufacturers Association (TKSD)

<table>
<thead>
<tr>
<th>Number of companies</th>
<th>Turnover</th>
<th>National contact</th>
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<td>5,793</td>
<td>€44 billion</td>
<td>Mr. Haluk Erceber</td>
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<td>President</td>
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<td><a href="mailto:haluk.erceber@tksd.org.tr">haluk.erceber@tksd.org.tr</a></td>
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<tr>
<td>Direct employees</td>
<td>120,776</td>
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CHEMICAL INDUSTRY SNAPSHOT

Contributing to economic growth

The chemical industry in Turkey greatly benefitted from the export-oriented economic policy changes in 1980, and has shown an impressive increase both in production and exports over the last five years, contributing significantly to the growth of the national economy. Currently, the Turkish chemical sector – with its modern technology and diversified products – is the key component of the manufacturing industry and integrated into the supply chain of national industries, especially the textiles and automotive sectors.

The Turkish chemical sector covers a wide range of products in 14 distinct product chapters in foreign trade statistics. The production of the sector is generally aimed at products required by the manufacturing industry and the directly consumable products; namely, petrochemicals, thermoplastics, fertilizers, organic and inorganic chemicals, pharmaceuticals, synthetic fibres and yarns, soap and detergents, paints, etc.

Gross production value in the chemical sector reached €24 billion level in 2018 which comprised of chemicals/products (84%) and pharmaceutics (16%). Employment showed a 14.2% increase from 105,000 to 120,000 between 2012-2017.
Most of the companies in the chemical industry, especially private sector companies, are located in Istanbul, Izmir, Kocaeli, Sakarya, Adana, Gaziantep and Ankara. The Turkish chemical industry has developed significantly in terms of quality, productivity and protection of the environment, and has been successful in adopting the EU’s technical standards. In addition, Responsible Care, the chemical industry’s trademarked voluntary initiative on environmental, health and safety issues, has been successfully implemented since 1992.

The Turkish CLP (Classification, Labelling and Packaging) by-Law was issued in December 2013 and has been implemented since 2015.

The Turkish REACH by-Law was issued in June 2017 and entered in force in December 2017. Pre-notification will be made (like SIEF) till December 2020 and registration will be made between December 2020 and 2023.

The Turkish petrochemicals industry has shown considerable growth since 1970. The dominant organisation in the Turkish petrochemical sector is Petkim PetroKimya Holding A.Ş., which was privatised recently. There are two petrochemical complexes – one being the Petkim Aliaga complex in İzmir and the other Tupras (Turkish Petroleum Refineries Corporation) Korfez Petrochemical and Refinery in Kocaeli. These two complexes produce a wide range of petrochemicals including all common plastics (HDPE, LDPE, PS, PVC, and PP), aromatics, ethylene glycol, phthalic anhydride, terephthalic acid, carbon black, synthetic rubber, acrylonitrile and caustic soda. The total production of these petrochemicals reaches about 2.9 million tonnes/year, and meets about 25% of domestic demand.

Since the textile sector is well developed in Turkey, polymer production related to textiles and the production of textile chemicals have also developed simultaneously. Large plants for the production of polyamide, polyester and acrylic fibres have been built, and production has been directed to both foreign markets as well as the domestic. Almost all synthetic fibres are produced by the private sector, and synthetic fibre production is around 850,000 tonnes/year.

The fertilizer industry is also one of the key industries for Turkey, which has been supporting vast agricultural potential of the country. Currently, there are seven private sector companies producing fertilizers with total production capacity of 5.8 million tonnes/year. Turkey’s fertilizer production meets domestic demand and the surplus is exported.

Pharmaceuticals, soap and detergents, soda, chromium chemicals, boron chemicals, paints, sodium sulphate, fatty acids and rose oil are the other main areas of production of the chemical industry. The pharmaceuticals industry has become one of the leading sectors of the chemical industry, accounting for approximately 10% of the chemical industry’s production. Production trends of pharmaceuticals are closely related to domestic demand. Turkish pharmaceutical companies manufacture a wide range of pharmaceutical products, mostly generic formulas. The number of pharmaceuticals on the market is 3,100 and this number reaches 7,200 when alternative posologies are included. It is worth mentioning that the Afyon Alkaloids Factory produces 20% of the morphine consumed by pharmaceuticals industries all over the world.
The Turkish soap and detergent industry has shown very good performance in terms of quality, capacity and exports. There are many companies in the soap and detergent industry, about 15 of them being the major ones; among these there are multinational groups which have worldwide reputations. Since 1990, domestic and foreign investments in the Turkish cleaning products industry have increased considerably. As a consequence, detergent production capacity has reached 1.3 billion tonnes and soap production capacity has reached 550,000 tonnes; both have great export potential. The consumption and production of cosmetics and personal care products are growing rapidly. The number of cosmetics and personal care products is increasing every year. Hair care has the largest share of the cosmetics and personal care products market in Turkey. Natural cosmetic production is on the rise, due to growing demand for these products.

Parallel to the developments in Turkey’s construction, automotive and marine industries, the paints and coatings industry has also developed to become one of the most dynamic sectors of the Turkish chemical industry. Today the industry produces about 800,000 tons/year of paints and coatings and comprises of about 600 manufacturers, 20 of them being large-scale companies. In addition to meeting domestic demand, the Turkish paint sector has recently tended to export more.

Turkey has the largest soda factory in the Middle East, with a total capacity of 750,000 tonnes per year. In addition to light and dense soda ash, refined sodium bicarbonate and sodium silicate are produced at the Mersin plant. An extremely rich trona (natural soda ash) deposit was found near Ankara, at Beypazari and at present Turkey has substantial export potential for soda ash. Eti Soda A.č. started operation in 2009, with 1 million tonnes/year soda ash planned to be produced.

As one of the top five countries supplying chrome ore to world markets, Turkey produces and exports some of the most important chrome chemicals and derivatives such as sodium bichromate, basic chrome sulphate, chromic acid and chrome oxide.

Turkey also enjoys a comparative advantage in boron chemicals – borax decahydrate, borax pentahydrate, boric acid and sodium perborate – due to the size of its reserves, the quality of minerals and proximity to consumer markets. Eti Maden Isletmeleri Genel Mudurlugu is the dominant producer of boron minerals and boron chemicals and the sole exclusive exporter of boron chemicals.

Turkey has developed a substantial capacity and production of sodium sulphate. In sodium sulphate production, Turkey is second largest in Europe and sixth in the world.

Given Turkey’s climatic and ecological conditions, many medicinal and aromatic plants are cultivated or gathered from nature. Turkey is one of the most important rose oil exporters in the world market. The majority of these exports originate from the Isparta region. Laurel oil, thymus oil, lavender oil and origanum oil are also produced in Turkey.
In conjunction with recent industrial growth in Turkey, the consumption and production of many other chemicals are growing rapidly, and the number of chemicals produced is increasing every year. The recent developments in textile and leather chemicals are also worth mentioning, and many small- and medium-sized companies have recently started to operate in these two sectors. In the Turkish chemical industry, there are about 314 companies with foreign investment. The Turkish chemical industry has a 13% share of total foreign capital in Turkey.

**HOW ARE WE DOING?**

**Strengths**

- Unique geographical location for the world markets and oil & gas pipeline routes
- Presence of high younger population ratio as near-future employment potential
- Good adoption of international industry standards and EU harmonisations with EU market rules
- Presence of entrepreneurial capacity/potential of SMEs and Organized Industry Zones
- Presence of well-developed industry sectoral diversity and infrastructure

**Weaknesses**

- Relatively low allocations for R&D spending in chemical industry sectors
- Dependency on high-cost imported energy and raw materials supplies
- Limited production capabilities in high added-value chemical products
- Inefficiencies in clustering between chemical sectors

**OUR CONTRIBUTION TO A COMPETITIVE EUROPE**

- Incentives by the state government were recently declared for new chemical industry investments, with the goal of reaching a US$50 billion in chemicals exports by 2023.
- Incentives in the form of land allocation and investment credit support for one establishment of integrated chemical industry clusters were also developed, both at national and at regional level, to encourage and sustain innovation, along with new domestic and international production facility investments

Landscape of the European Chemical Industry Website:

http://www.chemlandscape.cefic.org/country/turkey/