

Chemicals Industry in Turkey



FMConsulting prepares market snapshot reports from selected trusted sources in Turkey which are regularly updated. These reports are brief presentations overviewing available facts & figures on major industries in Turkey. If you need a specific research on different segments, please contact with our Head of Market Research Department Mrs. Berna Gurleyen (b.gurleyen@fmconsulting.com). We would be happy to support you.



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A Overview



▶ Introduction

- **17,782** chemical product **manufacturers** and **276,843 employees** as of April 2017. (Source: Social Security Institution, April 2017)
- **99%** of the manufacturers in the chemicals industry are SMEs. (Source: Social Security Institution, April, 2017)
- For logistics reasons, most of the companies are located in **coastal regions** (Marmara, Aegean, Mediterranean regions).





▶ Foreign Investment to Chemicals Industry

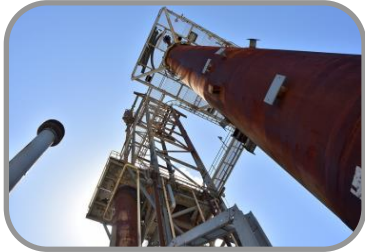
- **Foreign capital manufacturers:** 710 in chemicals and 369 in plastics & rubber as of June 2017. (Source: Ministry of Economy, 2017)
- **FDI:**
 - **USD 2.0 bn** in chemical and pharmaceuticals industry btw. 2012-2016, with a **13%** share in total manufacturing industry. (Source: Central Bank of the Republic of Turkey, 2017)
 - **USD 915 mn** in plastics and rubber industry btw. 2012-2016, with a **6%** share in total manufacturing industry. (Source: Central Bank of the Republic of Turkey, 2017)
- Various **foreign** investors:
 - Socar
 - Ravago
 - BASF
 - Dow
 - Indorama Ventures
 - Henkel
 - Unilever
 - Procter & Gamble
 - Colgate Palmolive
 - Bayer
 - Eastpharma
 - Kansai
 - Caparol
 - Akzo Nobel
 - Jotun
 - Sun Chemical
 - Deceuninck
 - Georg Fischer
 - Bridgestone
 - Pirelli
 - Goodyear
 - Fuchs



B Sub-sectors



B. Sub-sectors



Petrochemicals



Fibers



Plastics



Rubber



Soap and detergent



Cosmetics



Dye



Fertilizer



Pharmaceuticals



Soda



Boron Chemicals



B. Sub-sectors

▶ Petrochemicals



- **Petkim (www.petkim.com.tr):**
 - Turkey's sole integrated petrochemical plant with production capacity of 3.6 mn tons
 - Procures **naphta** from Tupras and other countries
 - **Product range:** ACN, PA, aromatics, LDPE, HDPE, PTA, PVC, EG and PP products, ethylene, CA, masterbatches and aromatics
- **Tupras Refinery (www.tupras.com.tr):**
 - 7th largest refinery in Europe
 - Crude processing capacity of **28.1 mn** tons per year & crude oil processing volume in 2016: **28.4 mn tons**
 - Investment volume in 2016: **USD 213 mn**
 - **4 refineries** in the cities Izmir, Izmit, Kirikkale and Batman
 - **Product range:** LPG, gasoline, kerosine, diesel fuel, fuel oil, etc.

PETKIM		TUPRAS	
Net Sales (TRY mn)	4,532.6	Net Sales (USD mn)	11,547
Production ('000 tons)	3,129	Sales (Thousand tons)	30,255
Exports (USD mn)	447	Exports (Thousand tons)	3,749

EUR 1 = TRY 3.34 in 2016
 Source: Petkim, Tupras 2017

- **Star Refinery (new investment; www.socar.com.tr):**
 - Investment volume: USD 5.6 bn
 - 10 mn tons/year crude oil refining capacity
 - Production will start in 2018



B. Sub-sectors

▶ Fibers



- **AKSA (www.aksa.com):**
 - **Product groups:** Acrylic fibers, textile fibers, technical fibers, carbon fiber.
 - **315,000 tons** of acrylic fiber production capacity in 2016.
 - **3,500 tons/year** carbon fiber production capacity by a subsidiary.

AKSA	2015	2016	2015/2016 Change %
Net Sales (USD mn)	746.6	651.3	-12.8 %
Exports (USD mn)	513.4	419.7	-18.3%

Source: AKSA, 2017

- **SASA (www.sasa.com.tr):**
 - Polymerization capacity of **350,000 tons/year**
 - **Product groups:** Specialty chemicals, fibers, filaments

SASA	2015	2016	2015/2016 Change %
Net Sales (TRY mn)	1,111	1,183	6.5 %
Sales (Thousand tons)	287	316	10.1 %
Exports (USD mn)	180	156	-13.3 %

Source: SASA, 2016



B. Sub-sectors

▶ Plastics

- Dependency on Imports in Plastic Raw Materials: **87%**
- **7.354** active companies with **306.000** people working; **369** of the companies are **foreign capital** companies
- Ranked **2nd in the EU** following Germany for production of plastic products
- Production of finished products' process capacity is **9.1 mn tons**
- Production value of **USD 34.7 bn**
- Market Size of Plastic Products: **7.9 mn tons, USD 32.6 bn**
- Distribution of Consumption: Packaging (40%), Construction (22%), White Goods (10%), Agriculture (6%), Textile (4%), Automotive (4%), Other (14%)



Source: PLASFED & PAGEV, 2016 & 2017

'000 tons	Raw Materials		Products	
	2015	2016	2015	2016
Production	1,014	1,014	8,568	8,867
Imports	6,269	6,523	585	589
Exports	688	744	1,575	1,551
Consumption	6,595	6,793	7,577	7,905
Exports/Production	68%	73%	18%	17%
Imports/Consumption	86%	87%	8%	7%

Source: PLASFED, 2017



B. Sub-sectors

▶ Rubber

- Turkey is more than **90%** import dependent in total rubber used as raw material and **100%** import dependent in natural rubber.
- There are **114** companies producing rubber raw material: 2 synthetic rubber; 107 rubber based solutions and 5 rubber ingredients. (Source: PAGEV, 2015)



Rubber Raw Material Supply-Demand Balance

'000 Tons	2011	2015	Change (CAGR) %
Production	5	5	-
Imports	476	529	2.7%
Exports	51	58	3.6%
Domestic consumption	430	476	2.6%

Rubber Products Supply-Demand Balance

'000 Tons	2011	2015	Change (CAGR) %
Production	540	605	2.8%
Imports	238	302	6.1%
Exports	464	449	-0.8%
Domestic consumption	314	456	9.8%
Exports/Production %	83	74	-
Imports/Consumption %	76	66	-

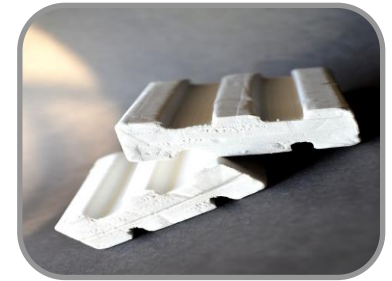
Source: PAGEV, 2015



B. Sub-sectors

▶ Soap and Detergent

- Main **raw materials imported** are animal and vegetable oil (tallow, olive oil, pomice oil, coconut oil, palm kernel oil, hazelnut oil) and essences.
- Soap production capacity (**400,000 tons**) is much higher than the domestic demand; **60%** of the production is **exported** (Source: Ministry of Economy [2016] and Ministry of Science, Industry and Technology, [2015])
- Detergent production capacity: **1.75 mn tons** (Source: Ministry of Economy, 2016)
- **750** manufacturers, **12,000** employees. (Source: Ministry of Economy, 2016)
- **9** largest companies carry out **90%** of the detergent production (Source: Ministry of Economy, 2016)





B. Sub-sectors

▶ Others



Cosmetics

- **3,250** companies are registered to the Ministry of Health.
- **170,000** products are distributed in the domestic market, **46,000** of them are domestically manufactured.
(Source: Ministry of Economy, 2016)



Dye

- **850 thousand tons** and **USD 2 bn** market size.
- Turkish manufacturers have **2%** market share in world market
- Turkey is the **6th largest dye manufacturer** in Europe
(Source: Ministry of Economy, 2016)



Fertilizer

- **6.7 mn tons** consumption
- **3.4 mn tons** production in 2016. (Source: Gubretas, 2017)



B. Sub-sectors

▶ Others



Pharmaceuticals

6th largest pharmaceuticals market in Europe.

(Source: AIFD and IMS Health, 2017)

For details, please see “Healthcare & Pharma Industry” in this series.



Soda

Two large manufacturers:

- **Soda Sanayii A.S.:** **4th largest** manufacturer in Europe with **2.3 million tons** of soda production capacity.

(Source: Sisecam Chemicals, 2017)

- **Eti Soda:** Manufactures **1 mn tons** of soda ash and **100 tons of sodium bicarbonate** per year. (Source: Eti Soda, 2017)



Boron

The state institution **Eti Maden** is active.

- **3,275 mn tons** reserve
- **2.7 mn tons** of production capacity. (Source: Eti Maden, 2017)



C Foreign Trade

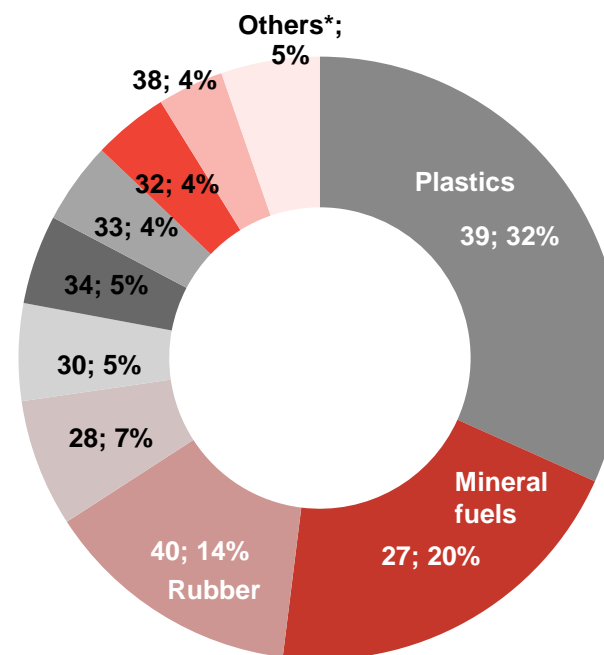


C. Foreign Trade

▶ Chemicals Total Exports

HS	Product Group	2015 (USD mn)	2016 (USD mn)	Change 2015/2016
27	Mineral fuels, minerals oils and product of their distillation	4,518	3,211	-29%
28	Inorganic chemicals: organic or inorganic compounds	1,249	1,086	-13%
29	Organic chemicals	474	473	0%
30	Pharmaceutical products	878	827	-6%
31	Fertilisers	134	146	9%
32	Tanning and dyeing extracts, fillers and stoppings: inks	681	641	-6%
33	Essential oils and resinoids:perfumery, cosmetic or toilet prep.	695	696	0%
34	Soap, organic surface, active agents, washing preparations ext.	868	759	-13%
35	Albuminoidal substances: glues: enzymes	176	182	4%
36	Explosives: pyrotechnic products: matches: pyrophoric alloys etc.	30	27	-11%
37	Photographic and cinematographic goods	13	11	-8%
38	Miscellaneous chemical products	546	563	3%
39	Plastic and articles thereof	5,358	5,026	-6%
40	Rubber and articles thereof	2,165	2,202	2%
Total		17,786	15,851	-11%

Share of Product Groups, 2016



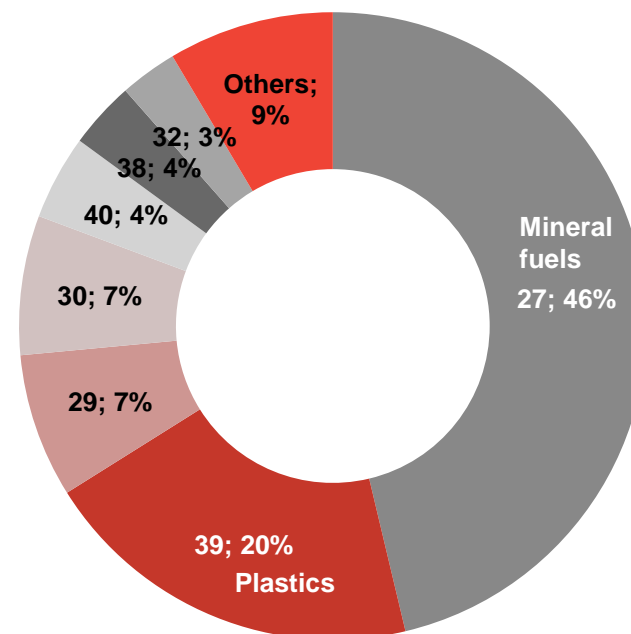


C. Foreign Trade

▶ Chemicals Total Imports

HS	Product Group	2015 (USD mn)	2016 (USD mn)	Change 2015/2016
27	Mineral fuels, minerals oils and product of their distillation	37,843	27,169	-28%
28	Inorganic chemicals: organic or inorganic compounds	1,389	1,220	-12%
29	Organic chemicals	4,716	4,360	-8%
30	Pharmaceutical products	4,296	4,217	-2%
31	Fertilisers	1,251	1,276	2%
32	Tanning and dyeing extracts, fillers and stoppings: inks	1,809	1,739	-4%
33	Essential oils and resinoids: perfumery, cosmetic or toilet prep.	1,102	1,114	1%
34	Soap, organic surface, active agents, washing preparations ext.	779	773	-1%
35	Albuminoidal substances: glues: enzymes	466	436	-7%
36	Explosives: pyrotechnic products: matches: pyrophoric alloys etc.	55	47	-14%
37	Photographic and cinematographic goods	157	146	-7%
38	Miscellaneous chemical products	2,050	2,024	-1%
39	Plastic and articles thereof	12,268	11,628	-5%
40	Rubber and articles thereof	2,525	2,561	1%
Total		70,706	58,708	-17%

Share of Product Groups, 2016





▶ Chemicals Export Destinations & Import Sources

Exports & Imports (27-40), 2016

Country	Export (USD mn)	Share	Country	Import (USD mn)	Share
Germany	1,006	6%	Russia	9,177	16%
Egypt	871	5%	Confidential	6,715	11%
Iraq	835	5%	Germany	4,263	7%
Italy	607	4%	Iran	4,123	7%
UK	586	4%	India	2,884	5%
Iran	546	3%	China	2,457	4%
UAE	518	3%	USA	2,234	4%
Saudi Arabia	477	3%	Italy	2,198	4%
Netherlands	472	3%	South Korea	1,909	3%
USA	466	3%	France	1,856	3%
Others	9,466	60%	Others	20,892	36%
Total	15,851	100%	Total	58,708	100%

Source: Turkish Statistical Institute, 2017

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