

# Chemical Affiliates

## Kumho P&B Chemicals, Inc.

Established in 1976, Kumho P&B Chemicals is a joint venture with Nippon Steel Chemical Company of Japan that produces a broad range of basic petrochemical products used in the construction, shipbuilding, automobile, electric, electronics, pharmaceutical, and paint industries including BPA (bisphenol A), phenol, acetone, epoxy resin, and MIBK (methyl isobutyl ketone). Since starting out in the phenol and acetone businesses in the mid-1970s, the company has continued to innovate and grow by providing customers both in Korea and abroad with high-quality products.

Continuous expansion over the years has made the company the world's No. 5 producer of BPA and No. 1 producer of MIBK, driving its rapid growth. With investment focused on continuous high-tech development, the environmental and safety fields, and capacity expansion to achieve economies of scale, the company aims to be a global leader in the phenol and phenol derivatives field, delivering greater customer value with the industry's highest quality.

897.8 KRW billion  
78.2 %

kpb.co.kr

## Kumho Mitsui Chemicals, Inc.

Established in 1989, Kumho Mitsui Chemicals is a leading manufacturer of MDI (methylene diphenyl diisocyanate), the main feedstock used to produce polyurethane. MDI is an advanced chemical product in growing demand in a diverse and growing array of applications ranging from car seats and dashboards, refrigerator insulation, construction panels, and synthetic wood to synthetic leather, spandex, and sneaker soles.

The company completed a 140,000 mtpy expansion project in 2009 and an additional 50,000 mtpy expansion in 2012. A new 100,000 mtpy expansion project currently on track for completion by the end of 2017 will make it Korea's No. 1 MDI maker. With an emphasis on customer satisfaction, the company is now refocusing on quality and environmental safety as it aims to aggressively enter overseas markets in its quest to become a global polyurethane maker.

519.6 KRW billion  
50.0 %

kmci.co.kr

## Kumho Polychem Co., Ltd.

Established in 1985, Kumho Polychem is Korea's No. 1 producer of EPDM (ethylene propylene diene monomer), a synthetic rubber widely used in auto parts and industrial goods, as well as TPV (thermoplastic vulcanizate) and KEPA (modified EPDM).

In July 2007, the company completed a plant expansion that adopted a proprietary ultra-low temperature polymerization process, an industry first. The company became the global industry's No. 3 EPDM producer in June 2015 when it commissioned its second plant, raising production capacity to 220,000 mtpy as it took a step closer to being the world's No. 1 EPDM maker.

389.0 KRW billion  
50.0 %

kumhopolychem.co.kr

## Kumho Terminal & Logistics Co., Ltd.

Established in 2009, Kumho T&L operates a logistics terminal in the Yeosu National Industrial Complex focused on reducing logistics costs and ensuring a stable supply of bituminous coal and other fuel sources to serve the needs of KKPC's Yeosu Energy cogeneration plants as well as plants owned by Korea South-East Power and Korea East-West Power.

The company operates a sealed system to handle and store bituminous coal to reduce costs and protect the environment. In addition to port logistics and storage, the company provides coastal and inland transportation services. The company aspires to become a total logistics provider, providing reliable, cost-effective, one-stop solutions to meet any logistics need.

50.8 KRW billion  
95.0 %

ktnl.co.kr

## Korea Energy Power Co., Ltd.

Korea Energy Power was established to operate solar PV generation facilities. In July 2013, the company commissioned a solar PV plant in Sacheon, Korea. The company is now generating revenue through sales of both electricity and renewable energy certificates (REC).

Today, the company's Sacheon plant, which was considered the largest regional rooftop solar project in Korea when it was completed in 2013, and its affiliates now have a total installed capacity of 27.2 MWh. The company's plants are capable of generating 34,000 MWh of electricity annually, enough to meet the needs of roughly 8,200 homes while reducing CO<sub>2</sub> emissions by over 14,000 metric tons.

KKPC plans to expand beyond solar into wind and other renewable energy businesses in Korea and beyond in the coming years.

3.1 KRW billion  
96.1 %

2016 Sales

KKPC Ownership