[CHEMICALS]



The United States is the second-largest chemical manufacturer in the world behind China, supplying the materials for consumer goods and intermediate products for virtually every industry. Texas is the nation's top chemical producer and exporter. The basic ingredients

originate in oil and gas fields and travel an immense worldwide supply chain that eventually yields plastics, packaging,

fertilizers, pesticides, synthetic fibers, cleaners, lubricants, paint SERIES OF REPORTS and a seemingly endless list of PREPARED ON TEXAS other materials. SUPPLY CHAINS; FOR

TEXAS' BASIC CHEMICAL MANUFACTURING INDUSTRY ACCOUNTS FOR ABOUT ONE-THIRD **OF THE INDUSTRY'S**

U.S. EXPORTS AND GDP.

Texas Chemical Manufacturing Supply Chain Resilience

The chemical industry is most vulnerable to severe weather events, cyberattacks, trade disputes, supply and demand volatility, and evolving global regulations. To mitigate supply chain unpredictability, industry leaders are examining ways to use advanced data analytics and other technology to improve agility and efficiency.

Texas Chemical Manufacturing Industry

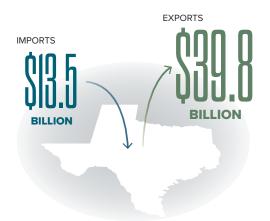
CHEMICALS REPRESENTED THE THIRD-LARGEST EXPORT FROM TEXAS IN 2020. WITH A VALUE OF AROUND \$40 BILLION, OR 14.3 PERCENT OF THE STATE'S TOTAL EXPORTS.

The industry fared better than most during the pandemic, with exports down only about 10 percent between 2019 and 2020.

The Gulf Coast specializes in "basic chemical manufacturing," a subset of the chemical manufacturing sector, which produces basic building blocks such as ethane, ethylene, methanol and benzene. The state's industry concentration of basic chemical production jobs is 2.66 times greater than the total United States, with high employment and high average wages. In the basic chemical industry, Texas contributes more than a third of the national GDP and about the same proportion of its exports.

Texas Chemical Manufacturing Industry Economic Data

ALL TEXAS CHEMICAL MANUFACTURING, **IMPORTS AND EXPORTS, 2020**



Sources: JobsEQ: U.S. Census Bureau, USA Trade Online AVERAGE ANNUAL WAGES

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MORE INFORMATION

\$113,372

EMPLOYMENT

83,534

GROSS STATE PRODUCT

\$52.7 BILLION

Sources: JobsEQ; U.S. Census Bureau, USA Trade Online

The top locations for Texas chemical manufacturing jobs are Harris County (29.7 percent) and Brazoria County (9.0 percent). In 2020, the share of industry jobs in Brazoria County was more than 10 times the national average.

TOP TEXAS COUNTIES BY CHEMICAL MANUFACTURING EMPLOYMENT, 2020

COUNTY	NUMBER OF EMPLOYEES, ALL CHEMICAL MANUFACTURING	INDUSTRY CONCENTRATION, ALL CHEMICAL MANUFACTURING	NUMBER OF EMPLOYEES, BASIC CHEMICAL MANUFACTURING	INDUSTRY CONCENTRATION, BASIC CHEMICAL MANUFACTURING
HARRIS	24,832	1.82	12,129	5.13
BRAZORIA	7,481	10.64	6,780	55.72
DALLAS	6,901	0.68	1,383	0.79
TARRANT	5,601	1.01	269	0.28
JEFFERSON	3,747	5.44	2,286	19.16

Source: JobsEQ. Data are based upon a four-quarter moving average ending 2021Q1.

Note: The location quotient represents an industry's proportionate concentration in a region; an LQ greater than 1.0 means that industry employment is more concentrated in the region than nationally. A high LQ can identify industries that have a regional competitive advantage, such as the ability to produce higher quality goods more efficiently

THIS IS ONE IN A SERIES OF REPORTS THE COMPTROLLER HAS PREPARED ON TEXAS SUPPLY CHAINS

TO SEE MORE INFORMATION ON SUPPLY CHAINS AND THE TEXAS ECONOMY: https://comptroller.texas.gov/economy/economic-data/supply-chain/