

“The following article, a re-print from Purchasingdata.com, was sent to us by one of our suppliers. It goes a long way in explaining why the price of glycol is so high. As the season for glycol approaches, we want to make our customers aware of these market conditions.”

Connie Kobus – Office Administrator

ETHYLENE GLYCOL Expect prices to stay inflated; capacity is close to demand

Global demand for ethylene glycol (EG) is expected to remain robust throughout 2004, keeping supply tight and putting continued pressure on prices for industrial grades, which already have risen in the past year by 21%. Operating rates have surpassed 90% of effective capacity, but there is almost 10% less production capacity than at the start of the decade.

Ethylene glycol is a raw material for the manufacture of polyester fibers, polyethylene terephthalate (or PET) resins, antifreeze formulations and other industrial products. So, as feedstock and energy costs continue to inflate and demand from chemical products and resin producers continues to perk up, EG prices “will remain strong and continue the upward trend”, says commercial vice president Chris Tse at MEGlobal in London, the new joint-venture EG supplier created by Dow Chemical, the largest U.S. chemicals manufacturer, and the

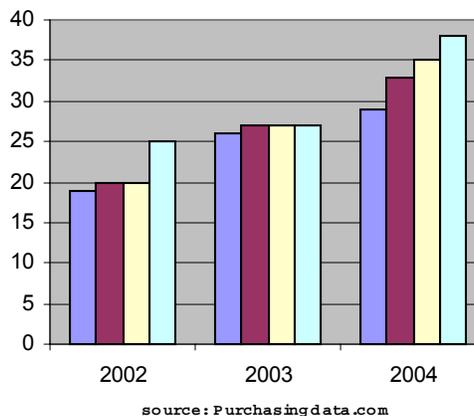
Petrochemical Industries subsidiary of Kuwait Petroleum Corp.

SUPPLY: Not matching demand

From 1995 to 2002, ethylene and ethylene glycol producers – faced with an oversupplied market, weakening demand and rising energy costs – decreased the level of operating capacity. The main reason EG supply is tight today can be traced back to poor corporate returns on investment, which prompted producers to set production at minimum levels or permanently shut plants. But, as demand for the primary chemical feedstock has been improving this year, there has been a resulting tightness in supply. The tightened supply, of course, made prices soar at the same time that world (and especially the Chinese) need for the chemical increased.

Spot prices for ethylene glycol have almost doubled

(quarterly, industrial grade, \$./lb)



Analyst Chas Willet, director of polyester and polyester raw materials for the Chemical Market Associates Inc. (CMAI) consulting firm in Houston, suggests that the reason for the price spike in the last few

months is that in the past few years factories have stopped building and instead have lowered their operation capacities and margins. Now that demand is back up again, pressure on the factories is more intense because they were in downsizing mode.

“The 2004 and 2005 outlook is good,” says Willett, “but the market’s supply goes long after that”. He says the petrochemical market “always corrects itself, although the troughs tend to be a bit longer than the peaks.”

Global Insight in Eddystone, Pa. predicts that U.S. ethylene operating rates will average 85 – 90% this year and 90%+ in 2005 – 2006.

“About 15 million metric tons of ethylene glycol is produced annually, and while demand in 2003 increased by 900,000 metric tons,” says Tse, “world supply increased by only 300,000 metric tons in 2002 and 2003, and will not catch up with the other 600,000 metric tons until the end of 2004. In North America, production is flat to down due to high raw material and energy costs and more diversion of ethylene oxide into derivatives other than EG.

Note that MEGlobal is producing ethylene oxide at Fort Saskatchewan and Red Deer in Alberta, Canada. But, Huntsman Corp. has idled permanently 175 million lbs. of ethylene oxide production in Port Neches, Texas, and Shell Chemical plans to close permanently one of three ethylene oxide/glycol units at Geismar, La., at the end of this year. The start up of Shell Chemical’s new 1.1 billion-

lb/year ethylene plant at Deer Park, Texas, in March is expected to alleviate some of the market tightness. And, industry supply globally, is expected to increase 6 – 7% over the next two to three years, suggests marketing manager John O. Smith, Dow Chemical's commercial manager and North American marketing manager for ethylene oxide and higher glycols. Still, for now, he says that "supply is extremely tight and inventories are near record lows." And, for suppliers to remain competitive in the EG market, rationalization of high raw material cost locations such as U.S. Gulf Coast will continue, says Smith. So, most new investments will come in what are termed "cost-advantaged regions" such as the natural gas-rich Middle East.

DEMAND: On the upswing

About 86% of the global demand for EG goes into making polyester fibers for clothing and furniture and to manufacturer PET soda and water bottles. Antifreeze makes up about 9% of end use, and some detergents and surfactants use the chemical. "The market is reaching that point in the chemical cycle when capacity and demand are about to intersect," says Willett. One reason is that demand has perked up; another is that many U.S and European producers are shifting more of their ethylene oxide supply to less cyclical and higher margin derivatives.

Analyst Franz Price at Globalinsight.com estimates that demand dropped 1 –2% in 2003, but expects an up trend of 5% annualized growth in 2004, which will continue in

2005. Demand in 2003 was 5.559 billion lbs. according to Innovation Group, a Morristown, N.J. market research firm, which projects a more bullish 8% growth in 2004 to 6.017 billion.

PRICING: More increases seen

Ethylene supply has tightened since the end of last year, due to strengthening demand and relatively low inventories. High prices for energy crude oil and, more important, natural gas – and rising feedstock costs have contributed to more than 27% in price increases for ethylene this year. That has resulted in rising prices for ethylene oxide and its derivatives, of which the most important is ethylene glycol.

In a nutshell, the 2004 rebound in industrial demand stemming from the economic recovery has boosted sales volumes in most regions for such commodity chemicals as ethylene and its derivative EG, and enabled the producers to raise prices. "Chemical operating rates at or above 90% suggest vastly improved pricing power among commodity chemical manufacturers", says analyst Kevin McCarthy at Banc of America Securities in New York. "Relative to 12 or 18 months ago, companies are in a better position to pass along feedstock increases to their downstream customers."

By late summer, the domestic spot-market price of the higher-priced butyl-ether grade EG had jumped to .40/lb. That is .16¢ more than the .24¢ average sales tag in August of last year, according to Purchasingdata.com. Similarly, industrial-grade EG at .43¢ in

August shows a .16¢ increase. However, this year's robust prices for crude oil and natural gas have kept pressure on profit margins for many basic chemicals. So, prices of ethylene, ethylene oxide and EG aren't expected to slip backward anytime soon; in fact, most forecasters suggest they will remain on an upward trend well into 2005. "Since the market demand for EG continues to outpace supply, expect EG prices to potentially climb a bit higher before leveling off," agrees Smith at Dow Chemical.

**SOURCE:
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