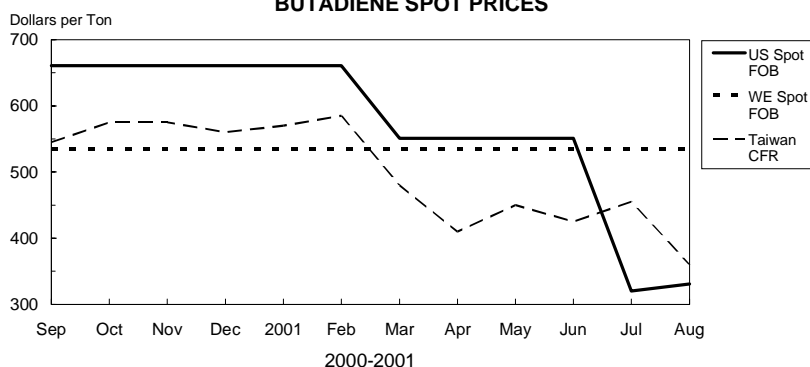
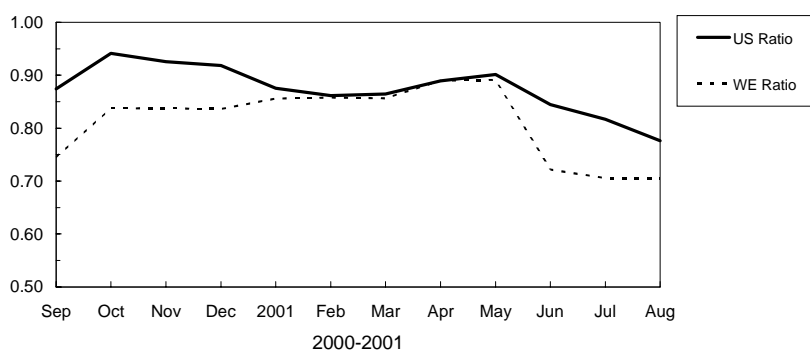


US PRICES		Jul-01	Aug-01		Aug-01
†=c/gallon		¢/pound	¢/pound		\$/ton
Crude C4s	Spot	13	12		260-270
Butadiene	Contract	20	19	FOB	419
	Spot	14-15	15	CIF	331
Isobutylene	High Purity	31	31	FOB	683
Raffinate 2†	Spot	54-55	47-48	DEL	206-210
Butene-1	Contract	21	21	FOB	463
EUROPEAN PRICES		\$/ton	\$/ton		Euro/ton
Crude C4s	Spot	165-170	140-150	FOB	156-168
Butadiene	Contract	365	376	DEL	420
	Spot	N.A.	N.A.	FOB	N.A.
Raffinate 1	Spot	260-265	260-265	CIF	290-296
Isobutylene	Contract	621-697	652-733	DEL	729-818
Raffinate 2	Spot	190-230	190-230	FOB	212-257
Butene-1	Contract	697-740	733-778	DEL	818-869
ASIAN PRICES		\$/ton	\$/ton		
Butadiene	Spot Taiwan/China	440-470	350-370	CFR	

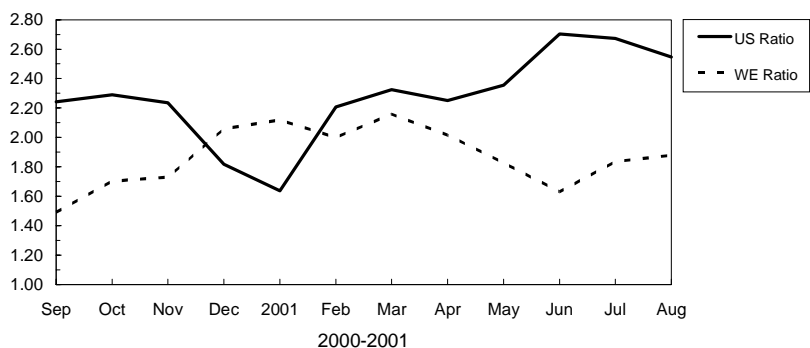
**US WEST EUROPEAN and ASIAN
BUTADIENE SPOT PRICES**



**US and WEST EUROPEAN CONTRACT PRICES RATIO
BUTADIENE : ETHYLENE**



**UNITED STATES BUTADIENE : EP MIX PRICES RATIO
WEST EUROPEAN BUTADIENE : NAPHTHA PRICES RATIO**



CRUDE C4s

The supply of crude C4s remains long in Europe with producers resorting to co-cracking and hydrogenation as far as possible to maintain some sort of balance.

With some storage space becoming available in the US (see below under 'Butadiene') exports to the US have become a possibility, but only at low prices – perhaps in the region of \$140-150/ton fob coast. Some US buyers are interested in incremental C4s more as a source of additional raffinate-1 and raffinate-2 than for butadiene. Raffinate-1 is also in demand in Europe because of healthy MTBE prices (around \$320/ton fob) and restricted supply because of low butadiene extraction rates. Some European producers of raffinate-1 have had to put contract customers on allocation.

The switch to light feedstocks in the US has reduced the domestic make of crude C4s. Some crackers were running butanes earlier in the month and this produces poor quality C4s with a low butadiene content and high content of unreacted butanes.

The supply of crude C4s in Korea will be restricted from mid-September when Honam Petrochemicals starts a 40-day cracker turnaround. YHCC's No 3 cracker is also due to start a one-month scheduled turnaround in mid-October.

BUTADIENE

In the US, three producers, Shell, Exxon and Equistar, nominated a roll-over at 19 c/lb for the September contract price. After some lengthy discussions with its customers, TPC also nominated 19 cents and so this is the level for the September contract. We know of no recent spot deals, at least of no arms-length open market deals. However there is talk that some producers have been selling product 'off contract' to their customers so as to back out possible

Chem-Netfax

BUTADIENE and C4s

low-priced imports. Prices of around 15 c/lb have been mentioned in this context.

The market is a little better balanced than it was with the latest inventory figures showing a reduction of 12 million pounds from 202 to 190 million. This means that there may soon be enough room in storage to make imports possible (which is not to say that the prices will be attractive.) Exxon will take its Baton Rouge plant down for a two-month turnaround starting on 1 September. This will reduce production capacity by 65 million pounds (30,000 tons). With crackers switching to lighter feeds, especially butanes, the make of C4s and thus butadiene will be reduced. There is some optimism among producers that customers have depleted their finished product inventories and that demand for butadiene, and possibly prices, may start to pick up.

Butadiene demand is still low in Europe, indeed in the whole world, and exports of finished product to the US are still not workable. Consumption by Butachimie has not been up to the level expected. Apparently Butachimie was due to conduct a test run on its new third production line during the second half of August. The news last week was that Butachimie's plant was down and that the company had declared *force majeure* on its production. We believe that the plant is now back in operation but there is no news concerning the success or otherwise of the test run. In any case, there is no certainty that the line will continue to run at capacity once the test has been concluded.

Exports from the Middle East are depressing butadiene prices in Asia. It appears that exports from Saudi Arabia to the US have become less attractive as US prices have fallen and Asian markets have become more the focus of attention. A 3,000-ton parcel was delivered to a buyer in the Shanghai area in mid-July at \$420/ton cfr. A second parcel of 4,000 tons has been sold to the same buyer at \$370/ton cfr and a third parcel has been sold to a Taiwanese buyer for delivery in late September at \$350/ton cfr.

Korean producers had been in discussions with Taiwanese buyers regarding spot deals before the Saudi material was offered, and actually made some sales at prices in the area of \$410-420/ton cfr. However, buyers' price ideas have now fallen by up to \$70/ton.

Some ABS producers in Taiwan are running at rates as low as 50% of capacity. Taiwanese producers of BR and SBR are at 65-70% and Korean SBR producers are running at rates in the range of 72-75%

of capacity. The Chinese SBR producer Shen Hwa is on turnaround for two weeks from 20 August to early September.

The new Formosa cracker and butadiene extraction unit are now running normally. Because major butadiene consumers in Taiwan, such as Chi Mei and TSR, are running at low rates, Formosa is seeking to export its surplus of butadiene to China.

UNITED STATES BUTADIENE IMPORTS

<i>From</i>		<i>May 2001</i>	<i>Jan-May 01</i>	<i>Jan-May 00</i>
	<i>Tons</i>	<i>\$/ton</i>	<i>Tons</i>	<i>Tons</i>
Canada	2,548	363	8,911	3,760
Brazil	-	-	2,990	2,988
Mexico	-	-	-	1,621
France	-	-	-	12,306
Germany	3,639	541	9878	7,041
Italy	-	-	-	7,501
Netherlands	1,227	485	6,231	12,238
Portugal	3,083	447	15,653	15,707
Spain			3,200	997
UK	3,001	476	8,466	2,998
Total	13,498		55,329	66,887

\$/ton figures are calculated from customs data and may not reflect market prices

Trade in large butane cargoes from the North Sea was very quiet at the end of July with no trades reported and few discussions taking place. Prices were estimated to be in the range of \$150-170/ton cif, but there were rumours of cargoes being moved out of the region, which should support slightly higher numbers. In the event, the BPAP for August was set at \$151/ton fob terminal, a reduction of \$31/ton, which was in line with perceptions of the market. Spot prices remained under pressure during the first half of the month, but then strengthened to \$170-175/ton cif as several cargoes were lifted for export to the US around mid-month. Supply was further tightened by production problems in the Kaarstoe field. By the late in the month, buyers who needed product to cover contracts were bidding \$180/ton without finding supply, and by month-end it was rumoured that a buyer was forced to pay \$210/ton for part of his requirements. Coaster butane prices also rose during August, starting the month at \$140-150/ton fob and ending it with numbers being talked in the range of \$185-200/ton fob.

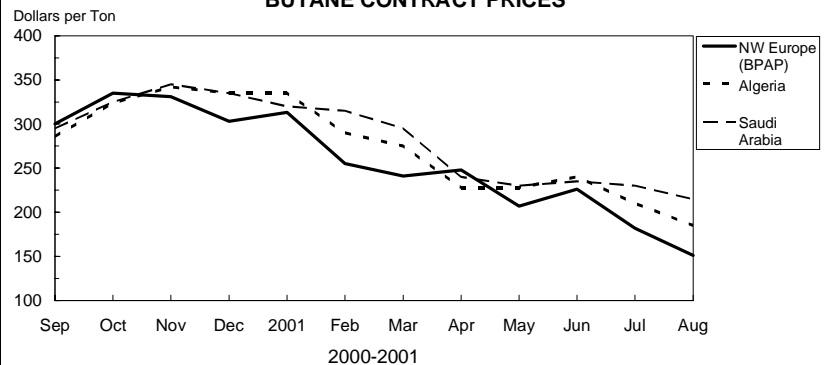
Sonatrach's August contract nomination was \$185/ton, down by \$25/ton from July. At the beginning of August, arbitrage business from the North Sea to the Mediterranean was possible, at least on paper, but the gap had disappeared by month end.

Saudi Aramco's contract price reduction of \$15/ton for August, down to \$215/ton, was a little more than the market has expected. The September nomination is unchanged at \$215/ton fob.

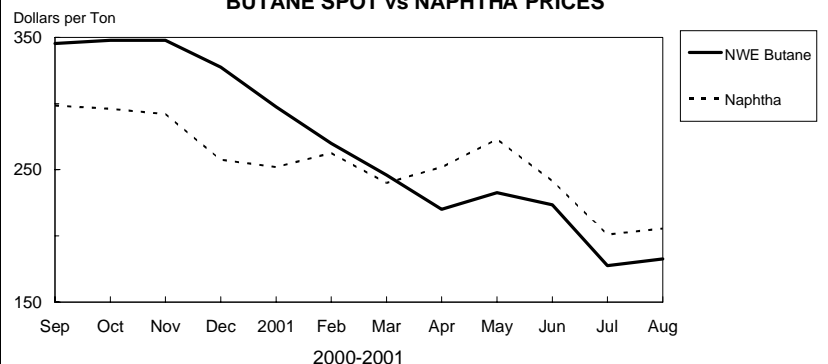
Butanes prices on the US Gulf have been in the high 40s to low 50s, c/gal fob, throughout August. Butanes prices have been supported by the strength of crude oil during the month and now there is increased demand from the refinery sector for blending into winter grades of gasoline.

		Jul-01	Aug-01			Aug-01
US PRICES		¢/gal	¢/gal			\$/ton
Spot	n-butane	46.00-47.00	52.50-53.00	FOB		238-240
Spot	Isobutane	45.50-46.00	51.50-52.00	FOB		234-236
NW EUROPEAN PRICES		\$/ton	\$/ton		Euro/ton	DM/ton
Contract	(BPAP)	182	151	FOB	169	330
Spot	Cargoes	160-170	200-210	CIF	223-234	437-459
MIDDLE EAST & AFRICA PRICES		\$/ton	\$/ton			
Contract	Algeria (Sonatrach)	210	185	FOB		
Contract	Saudi Arabia (Aramco)	230	215	FOB		

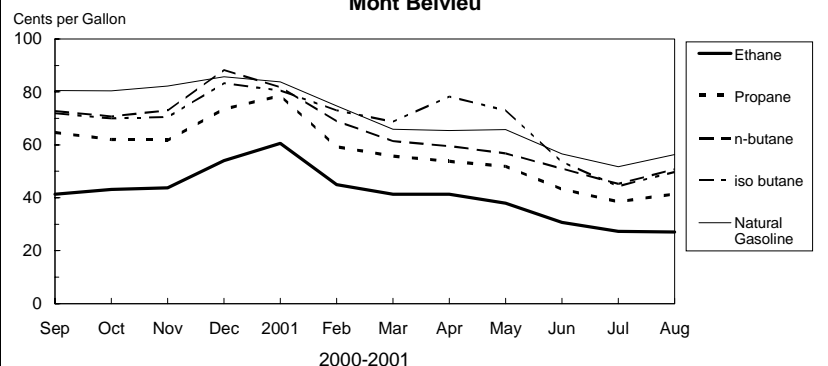
WEST EUROPEAN and MIDDLE EAST AFRICA BUTANE CONTRACT PRICES



NORTHWEST EUROPEAN BUTANE SPOT vs NAPHTHA PRICES



NATURAL GAS LIQUIDS Mont Belvieu



The steady weakening of downstream markets and repeated signals of slower economic growth have resulted in a much weaker outlook for the US ethylene market. In negotiations for July contract prices, many buyers have won concessions of 2-2.5 c/lb from their suppliers. Headline prices are thought to lie below 25 c/lb, but discounts and other price mechanisms would put net prices at still lower levels. Spot prices were recorded recently at around 17 c/lb, but most buyers can handle only contractual deliveries.

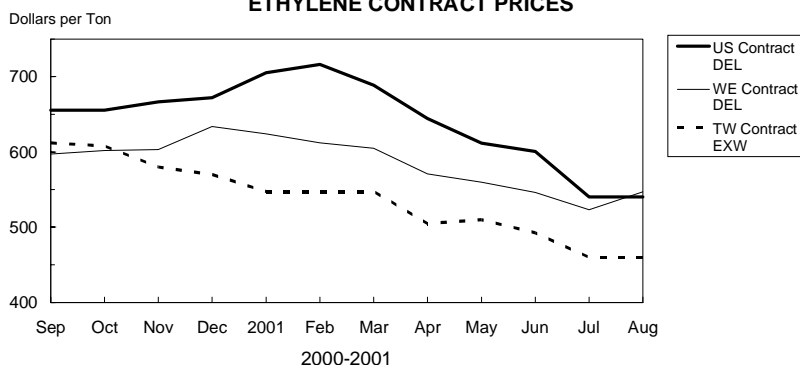
European trade remains thin, although recent business at around \$375/ton cif Med and Euro 490-500 delivered in the ARG pipeline have been seized as reference points for the industry. Deep-sea imports continue under contract, but traders are finding it difficult to elicit interest in imported cargoes on a spot basis. Crackers in Europe have been running at relatively high rates even as olefins demand has dwindled. No producer mentions pressure on inventory and there are no reports of cracker operating rates being lowered. Still, buyers and sellers are concerned that still lower prices might emerge.

Korean ethylene prices are being kept down because of continued weakness in derivatives markets, but there are very few Korean buyers or sellers in the spot market. Ethylene trade in the East Asian region has mainly involved Middle Eastern cargoes for Chinese buyers. Sellers' price ideas are a notional \$370-\$380/ton fob Korea, but no business is reported at such a level. Indeed, buyers report August import business at \$410-\$420/ton cfr Korea, suggesting that Korean exports would be possible only at prices much lower than current sellers' ideas. The extended shutdown of the Indonesian cracker has prompted some spot buying in Indonesia, with recent spot prices heard in a range of \$435-\$445/ton cfr.

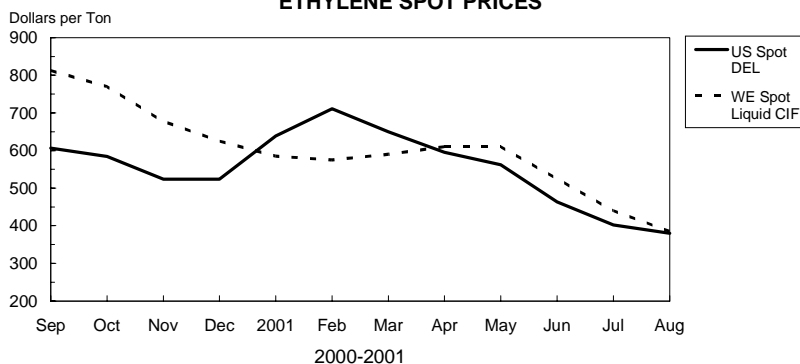
		Jul 01	Aug-01			Aug-01
US PRICES		¢/pound	¢/pound			\$/ton
Contract	Monthly	24.0-25.0	N.A.	DEL		N.A.
Spot	-	18.0-18.5	17.0-17.5	DEL		375-386
EUROPEAN PRICES		DM/ton	DM/ton		Euro/ton	\$/ton
Contract	Quarterly	1189	1189	DEL	608	546
Spot	Pipeline	1154-1193	958-978	DEL	490-500	440-449
	Liquid	987-1033	816-860	CIF	417-440	375-395
ASIAN PRICES		\$/ton	\$/ton			
Contract	South Korea	525	488	EXW		
Contract	Taiwan	490-495	N.A.	EXW		
Import	East Asia	430-450	420-440	CFR		
Import	S & SE Asia	450-480	430-450	CFR		

* Provisional

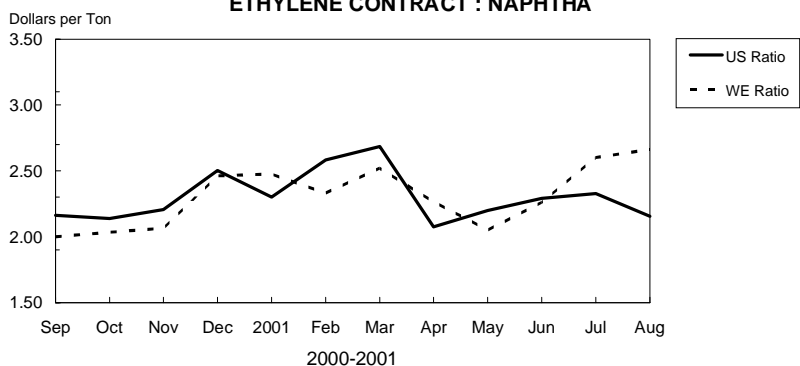
US, WEST EUROPEAN and TAIWANESE ETHYLENE CONTRACT PRICES



UNITED STATES and WEST EUROPEAN ETHYLENE SPOT PRICES



UNITED STATES and WEST EUROPEAN PRICE RATIOS ETHYLENE CONTRACT : NAPHTHA



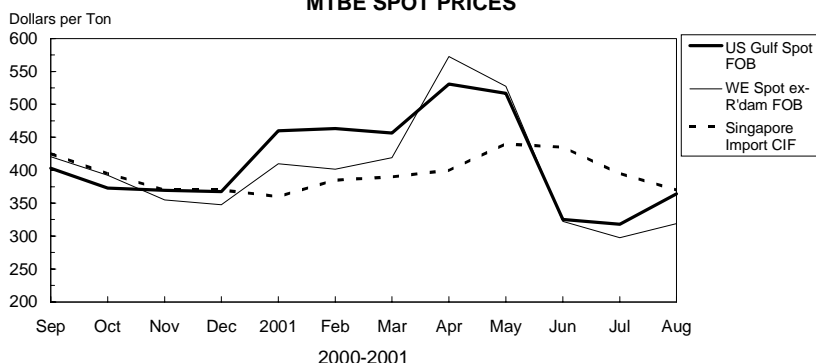
Demand for MTBE has remained strong during August in the US. Production problems have restricted supply and wide regular/premium gasoline spreads have stimulated demand for octane blending. MTBE has been trading on the Gulf at \$1.02-1.03/gal. Prices in New York harbour have been only about 2c/gal above the Gulf, which is not a wide enough differential to cover the cost of freight from the Gulf. Refiners have been in the market as buyers for a late- season surge in blending. MTBE producers estimate that demand for blending summer grades will last for another 4-6 weeks. Regular/premium gasoline spreads have been running at about 9 c/gal on the Gulf. However, the differential for RFG over conventional grades has only been about 2 c/gal.

Belvieu Environmental Fuels (BEF) lost 2-3 days of production last week with a mechanical problem and Global Octanes had to cut its operating rate for a few days although it did not shut down. TPC has had difficulties for some time now. We understand that they are in the process of bring back up the second dehydro which has been out of action for a couple of months. Both units were down for a short time earlier in the month. With both Huntsman and Lyondell having turnarounds scheduled for September, MTBE supply is quite snug. Butanes are trading at about 51 c/gal at the moment. That means a raw material cost per gallon of MTBE of 65-66 cents. Producers are making good money at today's prices.

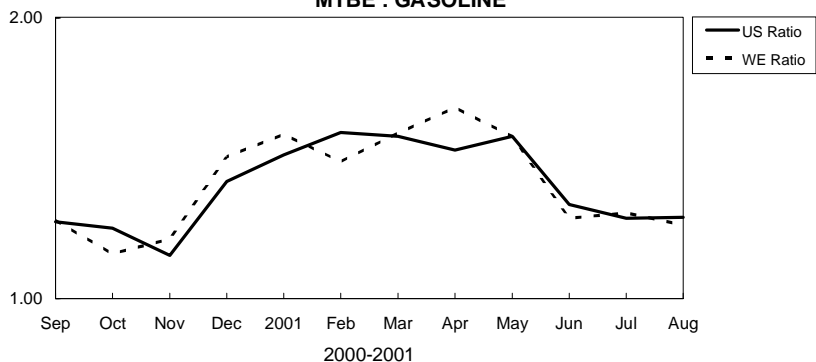
In Europe spot MTBE weakened a little earlier in the week to \$315-323/gal. Even so the ratio to premium gasoline is a satisfactory 1.35. The arbitrage window to the US East Coast should now be open. Product bought at \$315/ton could be brought in at about 99 c/gal and the market is at \$1.0-1.05/gal.

		Jul-01	Aug-01			Aug-01
US PRICES		c/gallon	c/gallon			\$/ton
MTBE	US Gulf Spot	89-90	102-103	FOB		362-366
EUROPEAN PRICES		\$/ton	\$/ton		Euro/ton	DM/ton
MTBE	Spot ex-Rotterdam	296-299	315-323	FOB	352-361	688-705
ASIAN PRICES		\$/ton	\$/ton			
MTBE	Singapore, Imports	370-420	370	CFR		

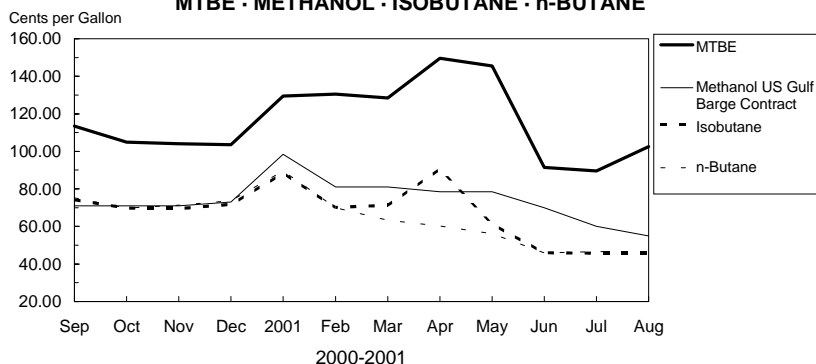
**US, WEST EUROPEAN and FAR EASTERN
MTBE SPOT PRICES**



**US and WEST EUROPEAN SPOT PRICE RATIO
MTBE : GASOLINE**



**UNITED STATES PRICES
MTBE · METHANOL · ISOBUTANE · n-BUTANE**



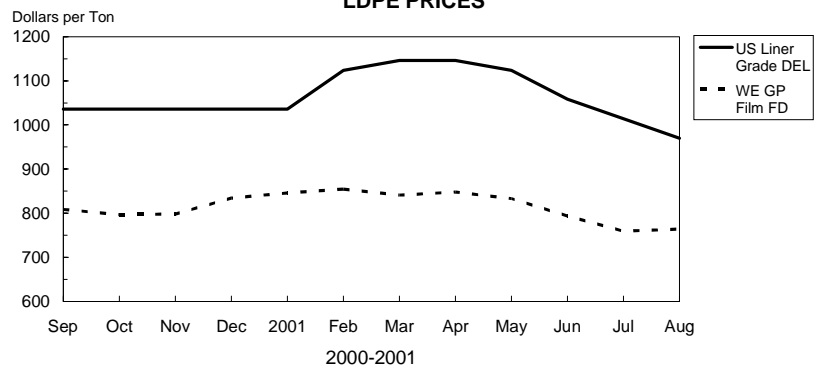
Demand in the US is still poor. The downstream chain is low on inventory at converters and for finished goods. Prices have degraded 1-2c/lb since July. LDPE production utilisation is about 85% whilst LLDPE is high 70%- low 80%. A new price initiative has emerged through August. Equistar and Eastman led with a 5c/lb increase for 17 September notification. Others followed but have chosen 1 October and this will become the more likely outcome. With 30 days notice for most medium and large accounts, upward movement in price will not happen before November.

The latter half of July into August has seen more price concessions from European producers. LDPE has fallen by a greater amount, as LLDPE is at minimum acceptable levels. The delta between the two products has closed from 20 to about 15pfg/kg. Producers continue to manage production to avoid building stock. Basell has posted a price increase of Euro100/ton for September, followed by others. There is general support for the increase by producers but some indicate that they may take a different approach, perhaps splitting the move into two steps through September into October.

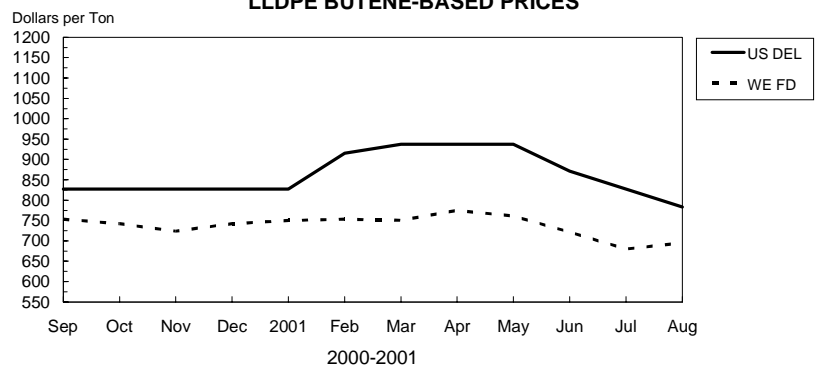
Demand for LLDPE from Korean producers into export has reduced as they hold out for prices above those from other suppliers selling down at \$630-640/ton cfr Chinese port. A surge in Chinese demand is expected in the second half of September. Korean exporters are also meeting increased competition into China for LLDPE, with both North American and European activity reported above recent levels. As with LDPE, Korean producers are at the top end on price for LLDPE at around \$580-600/ton cfr Chinese port, whilst others are offering at around \$570-580/ton cfr for Chinese business.

		Jul-01	Aug-01			Aug-01
US PRICES		¢/ pound	¢/pound			\$/ton
LDPE	Liner Grade	45-47	43-45	DEL		948-992
LLDPE	Butene-based	36-39	34-37	DEL		750-816
EUROPEAN PRICES		DM/kg	DM/kg		Euro/ton	\$/ton
LDPE	GP Film	1.70-1.75	1.63-1.69	FD	833-864	746-774
LLDPE	Butene-based	1.52-1.57	1.48-1.54	FD	757-787	678-705
ASIAN PRICES						
LDPE	GP Film	Taiwan	650-660	630-640	CFR	
LLDPE	(Butene)	Taiwan	590-600	570-580	CFR	

UNITED STATES and WEST EUROPEAN LDPE PRICES



UNITED STATES and WEST EUROPEAN LLDPE BUTENE-BASED PRICES



US and WEST EUROPEAN LDPE PRICE MARGINS over 1.03 x ETHYLENE

