

*T-PSI's*

*PLASTIC MARKET MONTHLY*

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**PVC**

**SEPTEMBER 2002**

IN THIS ISSUE

MARKET BRIEF	2-3
MARKET MIX BY PROCESS	4
MARKET SHARE BY PROCESS	5
ECONOMIC TRENDS	5
MONTHLY PRICES	6
FEEDSTOCKS	7
GRADE SHEET	8
REFERENCE	9

**US & Canada Prices/Margins**  
(Cents per Pound)

	Jun	Jul	Aug
Ethylene Contract	23.0	23.0	23.0
Chlorine Contract	5.0	11.0	11.0
PVC Average <sup>(1)</sup>	33.54	35.81	36.34
General Purpose			34.7-57.6
Pipe			30.3-44.3
Siding			32.0-43.5
Film, Flexible			36.5-48.9
Wire & Cable			39.7-53.1
Producer's Gross Margin <sup>(2)</sup>	19.81	18.30	18.83

**Estimated Capacity Utilization PVC**

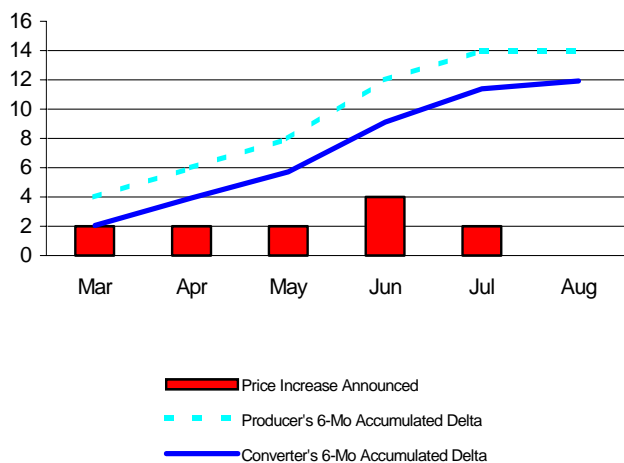
	July	2002 YTD	2001 YTD
Resin Producer <sup>(3)</sup>	84%	87%	82% ↑
Resin Converter <sup>(3)</sup>	102%	99%	92% ↑

**US & Canada PVC Resin Producer Statistics**  
(Millions of Pounds)

	July	2002 YTD	2001 YTD
Production <sup>(4)</sup>	1,239	9,006	8,532 ↑
Domestic Sales <sup>(4)</sup>	1,279	8,631	8,076 ↑
Total Sales <sup>(4)</sup>	1,360	9,281	8,737 ↑
Inventory Change	-121	-275	-205

- (1) Volume weighted average of price paid by converters for all grades; formerly referred to as realizations
- (2) Excludes other variable costs beyond feedstock cost
- (3) Source: Survey by T-PSI & APC statistics
- (4) Source: APC; all sales line items include sales of imports

**Producers vs Converters Price Survey**  
(cents per pound delta)



**August Price Movement Limited**

PVC prices, originally nominated up 2.0 cts/lb for August but later pushed into September, ended the month only slightly higher than July's level. On average, PVC buyers paid about 0.53 ct/lb more for resin in August. The August up-tick now puts the overall PVC average price at 36.34 cts/lb for delivered material.

**Producer-Converter Price Delta Remains Small**

The producer-converter price delta, the difference between what producers say has gone through to the market and what converters are actually paying, remains surprisingly small. This story has repeated itself all year due to the ability of producers to push through nearly all their nominations to date. Producers have had much success in balancing supply and demand since January. Given this, the balance has tipped in favor of demand, which has helped producers maintain a rather tight PVC market.

According to the Producers vs Converters Price Survey graph below, converters report taking increases from February 1<sup>st</sup> through August 30<sup>th</sup> at an average increase of 11.92 cts/lb for product delivered to their plants. Resin suppliers report that nearly all 14.0 cents have been successfully implemented by the end of August. To explain the small difference between converters and producers deltas, it is worth noting that the converter's price reflects product delivered during the month, while producers think in terms of product shipped. The bottom of page 6 provides a complete explanation.

More than half of the PMM converters surveyed reported that their August resin shipments were under 30- or 60-day price protection. Some converters reported that they had successfully negotiated 90-day price protection, which clearly shows a time lag in the implementation of the July price increase.

**Can September's Nomination Hold?**

Due to the relative ease in which 14.0 cents of resin price increases were implemented since the start of the year, producers announced another round of price hikes for August 1<sup>st</sup>. Unfortunately, there were signs that upward price pressure had begun to weaken. The threat of August's nomination failing encouraged one PVC producer to push the latest price increase from August 1<sup>st</sup> to September 1<sup>st</sup>. Most producers followed suit and also moved their nomination ahead one month to September. Some reports suggest a lone PVC supplier has opted to not increase prices in September. This is the news many converters had been waiting to hear.

According to our survey data, resin buyers report that they will be paying less than 0.5 cts/lb for their September shipments. This may simply be the remainder of the July 1<sup>st</sup> 2.0 cts/lb nomination working its way into the market.

Producers on the other hand are still looking for a little more margin relief as they have been hit with significantly higher feedstock costs earlier in the year. August margins, as calculated by the PMM, rose about half a cent per pound of resin. Although the outlook for a successful September increase looks questionable, producers reaffirmed their commitment in early September to secure another 2.0 cents. If successful, the September price increase would bring PVC resin prices up a total of 16.0 cts/lb for the year thus far.

**Stable Feedstock Prices May Help Converters**

Feedstock costs were not much of a factor in the August settlement. Ethylene prices remained flat in August. Ethylene contracts have now rolled over for the fourth consecutive month and spot prices continue to fall. Chlorine contracts increased in Q2, but there has been no sig-

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nificant movement in prices over the past two months. Chlorine producers announced an increase of \$40/ST effective immediately or as contract terms permit. Some buyers felt the chlorine market had already peaked for the year and that the latest nomination would encounter resistance. Farther downstream, the EDC market remains steady to down as export demand has dwindled and prices have followed. Current EDC prices are heard to be in the range of 15.0-16.0 cts/lb. The VCM market is showing similar signs of weakness. Although plants are running full-out, prices have dipped about a penny since July. The current domestic VCM price is reported to be in the range of 24.0-25.0 cts/lb.

Obviously, the case for higher PVC prices cannot be made using the rising feedstock cost argument. Resin supplies at the producer level remain somewhat tight, but spot material is available below contract rates. Continued strong demand for PVC resin seems to be the main ingredient

in the producers' attempts to boost prices yet again in September.

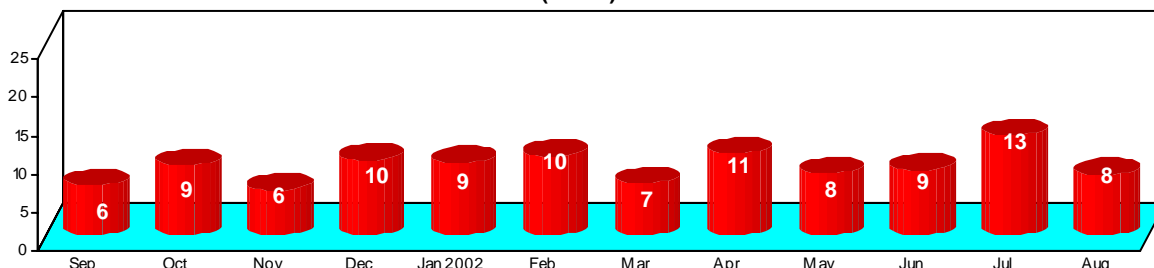
**Converter Supplies Fall in August**

The Days of Supply graph suggests that converter inventory levels have dropped considerably in August. Inventories dropped by 5 days to end the month at 8 days of supply. This may indicate that resin buyers are working off inventory to possibly avoid the September price increase. Deliveries of resin moved slightly higher in August but the overall trend continues to point to a slow down in buying interest.

**PVC Demand Remains Strong**

According to the latest statistics from the APC, demand for PVC resin continues to post solid gains. Domestic sales in July were reported to be up 6.9% YTD. Domestic production is also up by slightly more than 5.0%. The higher resin output coincides with the PMM's estimate of resin producer operating rates that are calculated to be around 87% YTD.

**Days of Supply at Converters<sup>(6)</sup>**  
**(Resin)**



(6) Days of Supply (DOS) replaces Inventory Days from previous issues. DOS is the converter's volume weighted average days of resin supply, in inventory, at month end. This figure takes into account plant throughput and days of production.

**Top Importing Countries to US**  
**(Millions of Pounds) <sup>(5)</sup>**

	Jun	YTD
Canada	32	206
Japan	4	7
Mexico	3	18
Colombia	3	8
Germany	3	12
France	0.3	2
Brazil	0.2	0.4

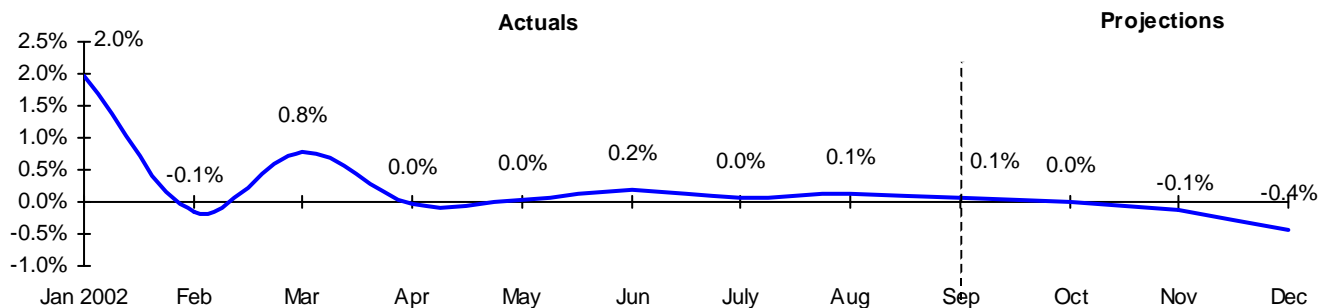
**Top Countries for US Exports**  
**(Millions of Pounds) <sup>(5)</sup>**

	Jun	YTD
Canada	43	219
China	18	241
Costa Rica	8	26
Hong Kong	3	33
New Zealand	3	25
Ivory Coast	3	17
Chile	3	6

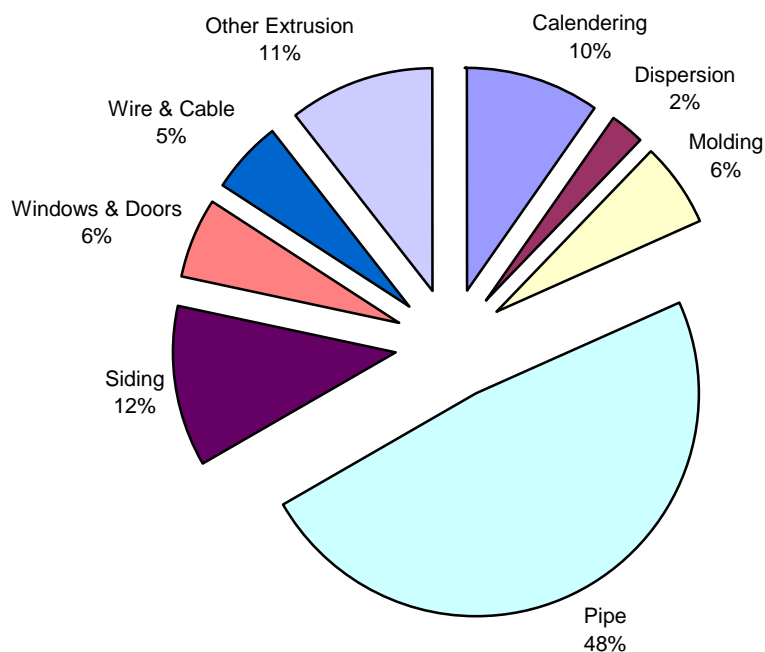
**Net Exports**  
**(Millions of Pounds) <sup>(5)</sup>**

	Jun	YTD	2001 Total
U.S. Exports	97	778	1,462
Imports to U.S.	45	258	501
Net Exports	52	520	961

**Converters Change in Deliveries from Previous Month**



MARKET MIX BY PRIMARY CONVERSION PROCESS



SUPPLIER MARKET MIX BY PRIMARY CONVERSION PROCESS

	Calendering	Dispersion	Molding	Pipe	Siding	Windows & Doors	Wire & Cable	Other Extrusion	Totals
CertainTeed	0.0%	0.0%	0.0%	40.2%	58.0%	1.8%	0.0%	0.0%	100.0%
Colorite Plastics	32.3%	67.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Compounders	0.2%	2.3%	12.5%	34.7%	0.6%	11.4%	18.1%	20.2%	100.0%
Distributors/Brokers	0.0%	6.8%	18.5%	11.6%	0.7%	20.1%	4.0%	38.2%	100.0%
Formosa	17.8%	3.3%	0.6%	68.6%	0.8%	0.8%	0.3%	7.8%	100.0%
Georgia Gulf	12.7%	0.0%	11.5%	41.8%	13.7%	2.7%	7.5%	10.1%	100.0%
Kaneka Delaware	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Keysor-Century	71.4%	0.0%	28.6%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
OxyChem	48.4%	45.2%	0.3%	0.0%	0.0%	0.0%	0.0%	6.2%	100.0%
OxyVinyls	12.3%	0.0%	1.8%	49.4%	22.9%	6.0%	0.2%	7.4%	100.0%
PolyOne	4.2%	8.8%	22.5%	4.5%	0.4%	14.0%	22.8%	22.8%	100.0%
Shintech	8.0%	0.0%	1.3%	65.3%	8.9%	6.3%	2.9%	7.3%	100.0%
Unspecified	9.6%	1.8%	13.0%	22.9%	30.5%	3.8%	3.8%	14.7%	100.0%
Westlake	0.0%	0.0%	0.0%	97.8%	0.6%	1.6%	0.0%	0.0%	100.0%
Average Supplier	9.8%	2.3%	6.3%	48.2%	11.9%	5.6%	5.4%	10.5%	100.0%

Source: T-PSI Market Share Report

SUPPLIER MARKET SHARE BY PRIMARY CONVERSION PROCESS

	Calendering	Dispersion	Molding	Pipe	Siding	Windows & Doors	Wire & Cable	Other Extrusion	Totals
CertainTeed	0.0%	0.0%	0.0%	2.3%	13.3%	0.9%	0.0%	0.0%	2.7%
Colorite Plastics	0.4%	4.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%
Compounders	0.2%	11.8%	23.7%	8.6%	0.6%	24.2%	39.8%	22.7%	11.9%
Distributors/Brokers	0.0%	3.2%	3.2%	0.3%	0.1%	3.8%	0.8%	3.9%	1.1%
Formosa	26.5%	20.9%	1.3%	20.8%	0.9%	2.1%	0.7%	10.9%	14.6%
Georgia Gulf	14.0%	0.0%	20.1%	9.4%	12.6%	5.2%	15.1%	10.4%	10.9%
Kaneka Delaware	0.0%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Keysor-Century	2.7%	0.0%	1.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.4%
OxyChem	6.9%	27.7%	0.1%	0.0%	0.0%	0.0%	0.0%	0.8%	1.4%
OxyVinyls	24.9%	0.0%	5.8%	20.5%	38.6%	21.3%	0.8%	14.0%	20.0%
PolyOne	2.8%	25.5%	23.9%	0.6%	0.2%	16.6%	28.0%	14.4%	6.7%
Shintech	13.7%	0.0%	3.4%	22.9%	12.7%	18.9%	9.1%	11.6%	16.9%
Unspecified	7.9%	6.4%	16.8%	3.8%	20.8%	5.5%	5.7%	11.2%	8.1%
Westlake	0.0%	0.0%	0.0%	10.8%	0.3%	1.5%	0.0%	0.0%	5.3%
Totals	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Source: T-PSI Market Share Report

ECONOMIC TRENDS

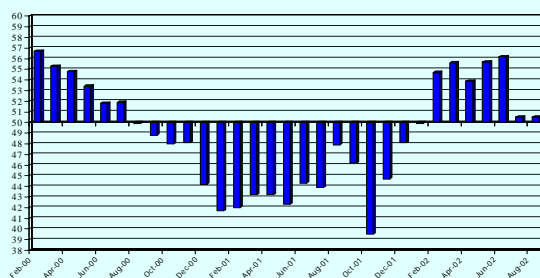
The U.S. economy continues to show improvement albeit at a slower pace than most analysts expected. The Commerce Department recently reported that the preliminary estimate for second quarter GDP remained stable at a 1.1% annual rate. This was a marked deceleration from the 5.0% growth rate achieved in the first quarter of 2002. The slowdown in GDP was largely due to a decrease in private inventory investment and in personal consumption expenditures. A sharp increase in imports, which are a subtraction in the calculation of GDP, also helped slow second quarter growth.

The Federal Reserve decided to hold interest rates steady at its August meeting. The Federal Funds Rate remains at 1.75%. Some analysts predicted an interest rate cut in August, but the Fed defended its decision by pointing to the underlying strength of the economy. Low interest rates have helped support the economic recovery by encouraging consumers to take advantage of low mortgage rates and zero-percent automobile financing. The evidence is clear that low interest rates are driving much of the current economic growth with new homes sales in July up 6.7% and auto sales increasing 3.3% in the same time period.

Although GDP growth continues to stagnate and interest rates are at historic lows, inflation remains subdued. The Consumer Price Index (CPI) increased only marginally in July rising 0.1%. The GDP Chained Price Index, the broadest measure of inflation, also increased in the second quarter but only slightly. Low inflation rates are to be expected as price deflation historically coincides with the first year of an economic recovery.

The economic outlook for the rest of the year is mixed. After a sharp drop in July, the August ISM manufacturing index remained unchanged at 50.5. The reading of 50.5 implies the manufacturing sector is still expanding, but the slow down in August has some economists debating the issue of a double-dip recession. Even though some areas of weakness persist, most economists believe the current growth of the economy is sustainable and should continue to improve into 2003.

Purchasing Manager's Index  
Expansion & Contraction of US Manufacturing



Source: Institute for Supply Management™, [www.ism.us](http://www.ism.us)

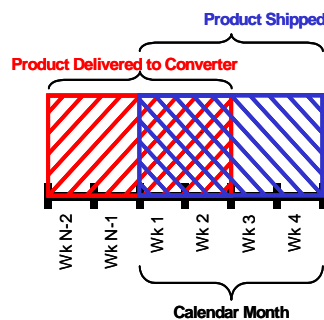
Key Economic Indicators

GDP, Annualized Growth Rate	Q2	1.1%	
Capacity Utilization, US Manufacturing	Jul	76.1%	↑ 0.1%
Housing Starts (millions)	Jul	1.649	↓ 2.7%
Building Permits (millions)	Jul	1.698	↓ 0.5%
Unemployment Rate	Aug	5.7%	↓ 0.2%
Prime Rate	Aug	4.75%	↔ 0.0%
Consumer Price Index (1984=100)	Jul	180.1	↑ 0.1%
Industrial Production Index (1992=100)	Jul	140.7	↑ 0.2%
Producer Price Index (1982=100)	Jul	138.9	↓ 0.2%

Source: US Government

	Converter Actuals				Delta		Converter Projections
	May	Jun	Jul	Aug	Current Month	6 Mo's To Date	Sep
<b>General Purpose</b> [Grade # 150100]							
90th Percentile	51.0	54.8	57.0	<b>57.6</b>	0.6	10.6	<b>57.9</b>
Vol Wtd Avg	36.1	39.7	41.8	<b>42.4</b>	0.6	9.9	<b>42.6</b>
10th Percentile	28.8	32.2	34.2	<b>34.7</b>	0.5	9.3	<b>34.9</b>
<b>Pipe</b> [Grade # 150200]							
90th Percentile	37.3	41.5	43.7	<b>44.3</b>	0.6	11.2	<b>44.5</b>
Vol Wtd Avg	27.8	31.8	34.0	<b>34.5</b>	0.5	10.2	<b>34.6</b>
10th Percentile	23.7	27.7	29.8	<b>30.3</b>	0.5	9.9	<b>30.4</b>
<b>Siding</b> [Grade # 150210]							
90th Percentile	36.9	41.0	43.1	<b>43.5</b>	0.4	10.2	<b>43.7</b>
Vol Wtd Avg	32.5	36.6	38.7	<b>39.1</b>	0.4	9.8	<b>39.3</b>
10th Percentile	25.9	29.6	31.6	<b>32.0</b>	0.4	9.0	<b>32.2</b>
<b>Film, Flexible</b> [Grade # 150420]							
90th Percentile	42.4	46.0	48.3	<b>48.9</b>	0.6	10.3	<b>49.2</b>
Vol Wtd Avg	33.8	37.4	39.6	<b>40.1</b>	0.5	9.6	<b>40.3</b>
10th Percentile	30.5	34.0	36.0	<b>36.5</b>	0.5	9.1	<b>36.7</b>
<b>Wire &amp; Cable - Resin</b> [Grade # 150600]							
90th Percentile	48.3	50.5	52.5	<b>53.1</b>	0.6	8.8	<b>53.4</b>
Vol Wtd Avg	41.9	44.0	45.8	<b>46.4</b>	0.6	8.0	<b>46.6</b>
10th Percentile	35.5	37.5	39.2	<b>39.7</b>	0.5	7.5	<b>39.8</b>

**EXPLANATION OF MONTHLY PRICES**



Prices are based on monthly survey of converters that subscribe to PMM. Converters fill in a data form for each grade; see last page of publication for sample data form and more details about methodology.

The Vol Wtd Avg price is weighted by delivered quantities while the 90th and 10th percentiles are not volume-weighted. Therefore, for contract purposes, we DO NOT recommend the use of the 10th or 90th percentile indexes.

Prices are for bulk quantities of prime material delivered to converters and received during the calendar month by either rail car or truck. "Product delivered" to converters will vary from "product shipped" by a supplier due to transit time. The following example illustrates differences that may occur between the product received by converters and product shipped by producers.

For illustrative purposes only, transit time is two weeks in this example and the calendar month is defined as weeks 1, 2, 3 & 4 in the diagram at left.

Shippers, represented in blue, tend to consider a month in terms of the volume shipped, the prices for each of those shipments, and the resultant average price generated. Buyers, represented in red, based on PMM's methodology, define a month as the product received during a calendar month. Given the two week transit time assumed for this example, a buyer would receive product shipped in weeks N-2, N-1, 1 and 2 during the calendar month. In relatively stable markets this creates no issue. In rapidly rising or falling markets however, this difference in time buckets can cause misunderstanding.

**Chlorine Price Increase Announced**

Several producers, including Pioneer, OxyChem, and PPG have announced another round of price hikes. Chlorine producers have nominated a \$40/ST increase to be implemented immediately or as contract terms allow. This latest nomination is on the back of a \$125-150/ST price increase that was successfully pushed through at the start of the third quarter. Little resistance was encountered in implementing the July 1 increase due to the continued strong demand for chlorine.

Contracts in August are reported to be in the range of \$210-230/ST. Spot chlorine, which has been very scarce over the past several months, is priced in the range of \$205-240/ST. Spot prices have come down a bit from the June-July timeframe, which suggests the chlorine market may have reached its price ceiling in late July.

**Chlorine Operating Rates Remain High**

The Chlorine Institute reported July effective operating rates at 97%. Low inventories combined with healthy demand, especially from the vinyl's sector, is encouraging producers to maintain production rates in the high nineties. Operating rates are expected to retreat once the slow-down in the PVC market has taken hold.

**Ethylene Flat? Or Not?**

The majority of the market has not settled on an ethylene contract price for August. According to our sources, only one buyer settled a contract flat from July. They expect that they may experience an increase of 2.0 cts/lb in September. This isolated case, however does not mean that an agreement is being reached at the contract level. In fact, another major buyer mentioned that no one wants to negotiate right now as both suppliers and buyers are hoping that the market will dictate a move in their favor.

Presently, availability of supply and spot prices as low as 16.0 cts/lb probably point to a flat settlement for August. September's ethylene contract price is still very much in question. While major producers are pushing for a 2.0 cts/lb increase, converters are looking for a decrease. Producers may not have much of a case with cash costs remaining about the same since May and natural gas prices dropping in early September from their August price levels.

**Ethylene Spot Re-Appearing in the Picture**

Spot ethylene is more available than last month. Trades were reported in the 16.0 - 17.0 cts/lb range in late August and early September. With spot prices moving down, there is pressure to keep contract prices flat or lower them.

**US & Canada Prices**

	Q1	Q2	Q3	Change
Chlorine Contract, \$/ST	40-50	90-110	210-230	↑
Chlorine Spot, \$/ST	275-300	250	220	↓

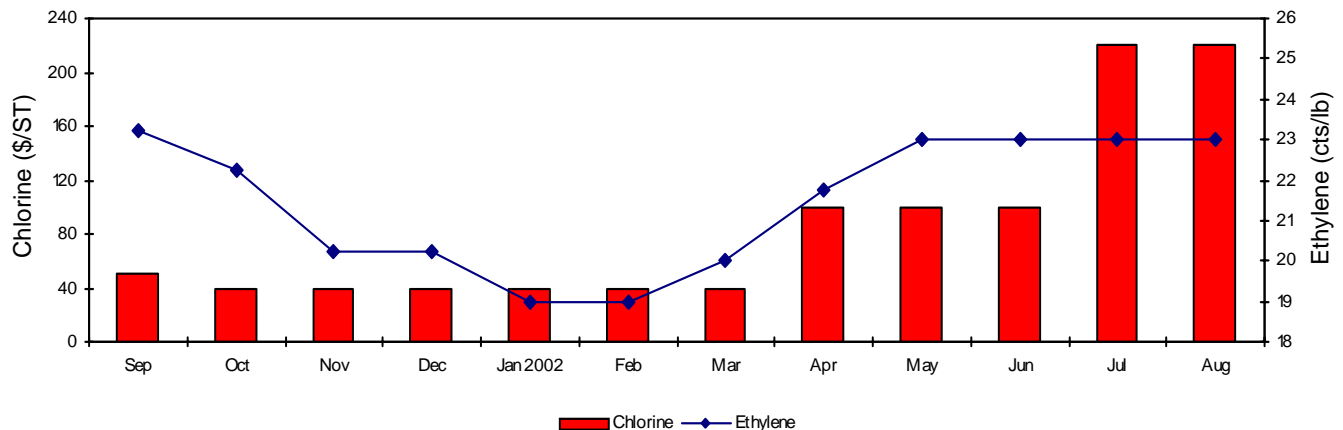
	June	July	August	Change
VCM Estimated Raw Materials Conversion Cost, cents/lb	16.14	17.51	17.51	↑
Ethylene Contract, cents/lb	23.0	23.0	23.0	↔
Ethylene Spot, cents/lb	20.0 - 20.5	17.5-18.5	16.0-17.0	↓
Ethane, cents/gallon	24.75	23.5	23.0-24.0	↑
Natural Gas, \$/MMBtu	3.20 - 3.60	2.80-2.95	3.10-3.68	↑
WTI Crude Oil, \$/Barrel	25.52	26.95	28.65	↑
Brent Crude Oil, \$/Barrel	23.63	25.69	26.81	↑
Arab Light Crude Oil, \$/Barrel	21.98	23.09	23.38	↑

**Natural Gas Price Fluctuates**

During the last weeks of August, the natural gas price rose to \$3.68 per MMBtu on the NYMEX, but is returning to the \$3.00 per MMBtu level in early September. Ethylene suppliers believe natural gas will move up overall in September.

The price roller coaster for natural gas is not steep, yet it has definitely been on the move throughout the first part of September and very late August, making price forecasting a tough task. We saw a surge in prices for the last weeks of August with a drop in early September. Henry Hub on the Gulf Coast was at \$3.20 - \$3.28 per MMBtu; the Pacific Northwest and the Northwest Pipeline at Sumas averaged \$2.80 per MMBtu and \$2.30; East coast prices at the New York - Zone 6 fell slightly to \$3.58 - \$3.64 per MMBtu; and Columbia Gas Transmission prices moved down to \$3.35 - \$3.52 per MMBtu in the first ten days of Sep.

**Contract Prices: Chlorine vs Ethylene**



<b>GRADES</b>	<b>TYPICAL SPECS</b>	<b>TYPICAL APPLICATIONS</b>	<b>GRADE #</b>
<b>General Purpose</b>	2.20 - 2.28 RV	Flexible Calendering, Flexible Extrusion	150100
<b>Pipe</b>	2.18 - 2.24 RV	DWV Pipe, Potable Water, Electrical Conduit	150200
<b>Siding</b>	2.18 - 2.23 RV	Vinyl Siding	150210
<b>Fitting</b>	1.80 - 1.90 RV	IM Pipe Fittings	150300
<b>Film</b>			
<i>Rigid</i>	1.80 - 1.90 RV Low Gel	Rigid Calendered/Extruded Film	150410
<i>Flexible</i>	2.20 - 2.28 RV Low Gel	Flexible Extruded Film	150420
<b>Bottle</b>	1.85 - 1.95 RV Low Gel	Blow Molded Bottles	150500
<b>Wire &amp; Cable</b>	2.26 - 2.34 RV and Jacketing	Electrical Wire Insulation	150600
<b>Copolymer</b>	10 - 15% VA	Floor Tile, Audio Records, Rigid Calendered Sheet	150800
<b>Off-grade &amp; Wide-spec</b>			150000
<b>PVC DISPERSION GRADES</b>			
<b>GP Homopolymer</b>	2.22 - 2.30 RV	Plastisols	150710
<b>Chemical Foam Homop. Copolymer</b>	1.90 - 2.20 RV	Flooring, Footwear, Fabrics	150715
	3 - 5% VA	Plastisols	150720
<b>PVC GRADES (COMPOUND)</b>			
<b>Window Profile</b>	Powder Pellet		150910 150911
<b>Bottle Grade</b>	Powder Pellet		150920 150921
<b>Fitting Grade</b>	Powder Pellet		150930 150931
<b>Other Compounds</b>	Powder Pellet		150900 150901

**METHODOLOGY**



The **Plastic Market Monthly (PMM)** is unique among resin market information and pricing services, in that it is the only service to obtain its information through a database of thermoplastic resin converters. All information, unless otherwise noted, is derived from a standardized survey of hundreds of converters conducted at the beginning of each month. In particular, the resin prices reported are those paid by converters for resin volumes that have been delivered during the calendar month (see Delivered Product section below); resin prices are not estimated nor are they list prices.

Each month the **PMM** receives hundreds of data forms from participating subscribers (resin converters) throughout North America. No other chemical or plastic publication collects such specific data from so many market participants. In some of the 60+ grades published, **PMM's** data represent more than 70% of the market. This method of collecting data enables subscribers to evaluate (1) pricing in the marketplace, (2) inventories at converting sites and (3) converters' anticipated short-term demand.

**DATA FORM**

Participants fill in data forms for each grade that they purchase, as shown in the example at right. Converters provide regular & spot supply delivered, volume weighted average price paid, expected deliveries over the next 4 months and expected average prices for the following months; resin usage, end-of-month resin inventory and days of production are also provided to generate Days of Supply. Data is submitted to **PMM** via fax or it's website. All data is verified and checked as it arrives; copies of invoices are requested when necessary and on a random basis.

The **PMM** is committed to the highest level of security and maintains proprietary data collected on data forms according to its policies and procedures.

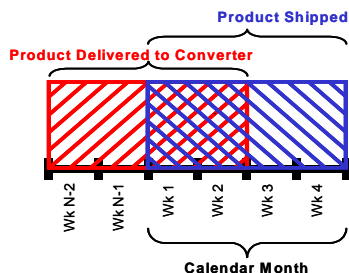
**PRICING BENCHMARKS**

The following are derived from data collected from hundreds of participating subscribers

- **90<sup>th</sup> Percentile:** A calculation to indicate the top of the price range; about 10% of our panelists are paying above this level. Not volume weighted.
- **Volume Weighted Average (Vol Wtd Avg):** A calculation of prices, weighted by resin purchased, then averaged.
- **10<sup>th</sup> Percentile:** A calculation to indicate the bottom of the price range; about 10% of our panelists are paying below this level. Not volume weighted.

**DELIVERED PRODUCT**

Prices reported on data forms and thus in the **PMM** are for bulk quantities of prime material delivered to converters and **received during the calendar month** by either rail car or truck. "Product delivered" to converters will vary from "product shipped" by a supplier due to transit time.



The diagram at left illustrates differences that may occur between the product received by converters and product shipped by producers. For illustrative purposes, transit time is two weeks in this example and the calendar month is defined as weeks 1, 2, 3 & 4 in the diagram at right.

**Shippers, represented in blue,** tend to consider a month in terms of: the volume shipped; the prices for each of those shipments; and the resultant average price generated. **Buyers, represented in red,** based on **PMM's** methodology, define a month as the product received during a calendar month. Given the two week transit time assumed for this example, a buyer would receive product shipped in weeks N-2, N-1, 1 and 2 during the calendar month. In relatively stable markets this creates no issue. In rapidly rising or falling markets however, this difference in time buckets can cause misunderstanding.

**REPORTS AVAILABLE**

All reports are published monthly on the 15th, unless a holiday or weekend occurs on the 15th in which case reports are published on the nearest working day. There are 8 reports to choose from with delivery via email, US Priority Mail or our access via our website, [www.t-psi.com](http://www.t-psi.com).

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|----------------|-------|---------------------------|-------------|
| HDPE Molding   | LDPE  | Polypropylene Homopolymer | PVC         |
| HDPE Extrusion | LLDPE | Polypropylene Copolymer   | Polystyrene |

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