GLYCOL & DERIVATIVES REPORT

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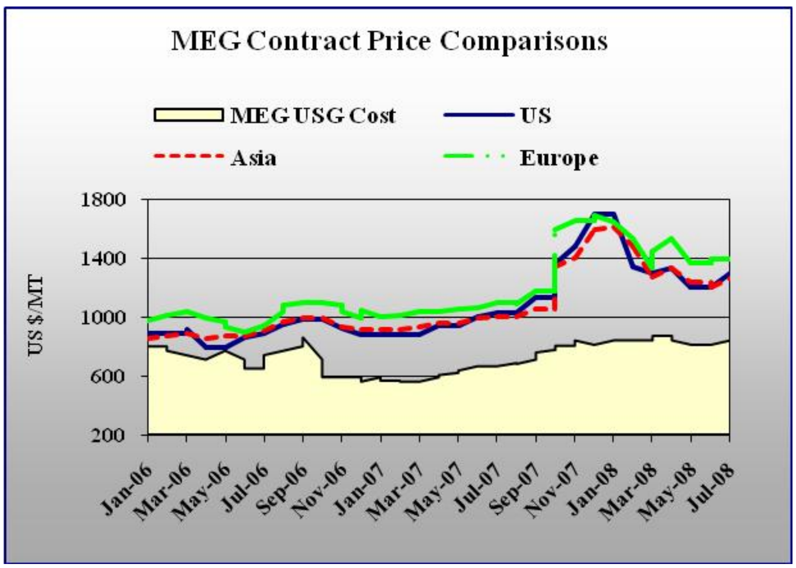
- ***MEG*** – MEGlobal set to increase benchmark 2 cts/lb to 65 cts/lb. Others aim for bigger hikes.
- ***DEG* –** Supply remains snug amid production cuts as most suppliers raise prices 5 cts next month.
- ***TEG* –** Producers announce 5 to 10 cts/lb increases for August as availability tightens.
- ***MPG* –** Prices due to go up 12 cts/lb or more, although some resellers target net hikes nearer 10 cts.
- ***Antifreeze*** – Prices continue to consolidate following the most recent 50 cts/gal increases.

Glycols Summary

North America

MEG Contract



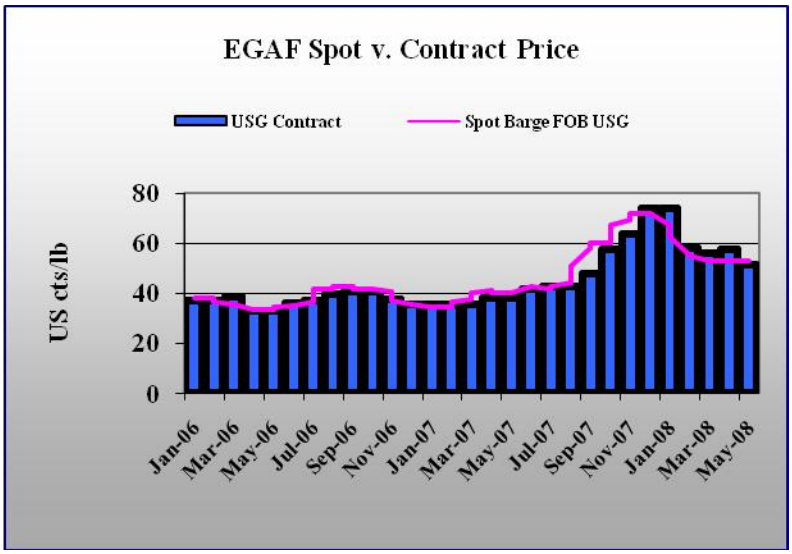
Contract prices appear ready to move higher again next month in the US, although many suggest net increases will be limited to a 2 cts/lb hike proposed by MEGlobal which will take its benchmark to 65 cts/lb. The moderate nomination follows the company's 5 cts/lb rise this month. Other producers targeted higher relative nominations for August. Old World announced a 4 cts/lb hike effective July 1st, although it later revised the announcement to reflect a substantial 14 cts/lb increase which it will continue to push in August. Shell Chemical moved up 3 cts/lb this month and nominated another 10 cts/lb for next month while Equistar nominated two 5 cts/lb hikes effective July 1st and July 15th respectively. Huntsman also nominated a 5 cts/lb August 1st increase. Although most have not imposed formal order control, some suggest several producers implementing relatively small increases next month are carefully watching sales volumes in order to prevent larger than normal pre-buying. With energy prices dipping through the week, spot MEG prices in Asia came under increasing pressure last week which leads some observers to expect a ripple of downward sentiment here over the coming weeks. At present domestic demand is still seasonally subdued and export opportunities remain stifled by extreme netback disparities.

Regional availability seems balanced despite somewhat slow seasonal conditions downstream. Balanced conditions are attributed in part to downtime on the USG as well as voluntary production cuts undertaken by Dow in particular. As previously noted, in October one of the Taft units is still scheduled for a planned outage, but Dow has pushed its planned turnaround at Seadrift into January of next year. Shell Chemical took its unit 2 down at Geismar last week for unscheduled maintenance and claims the plant will be out of action until mid-month. The company's unit 3 at Geismar is still scheduled for a planned 23 day turnaround in October. Elsewhere in the world supply is reportedly better, particularly in Asia where spot quantities from the Middle East continue to put pressure on local markets. In

Kuwait, Equate Petrochemical Company is now running its 600,000 mt/year with diverted ethylene at reduced rates until it starts up its new cracker's startup that was delayed until October or November. Still, the addition remains mitigated some as the cracker that feeds into the 443,000 mt/yr Marun glycol plant in Iran was shutdown unexpected due to gas supply issues earlier in the month and production might be off line until the first week of September.

In other news, PET producer M&G Group announced that it will expand the capacity of its single reactor Brazilian PET plant to 650,000 mt/year from its current capacity of 450,000 mt/year. The expansion, which could be completed within 12 to 15 months will make it the largest single reactor PET plant in the world. In related downstream news, earlier this month India's Reliance Industries announced plans to build a 200,000mt/year PET plant in Kinston, North Carolina by the end of 2009.

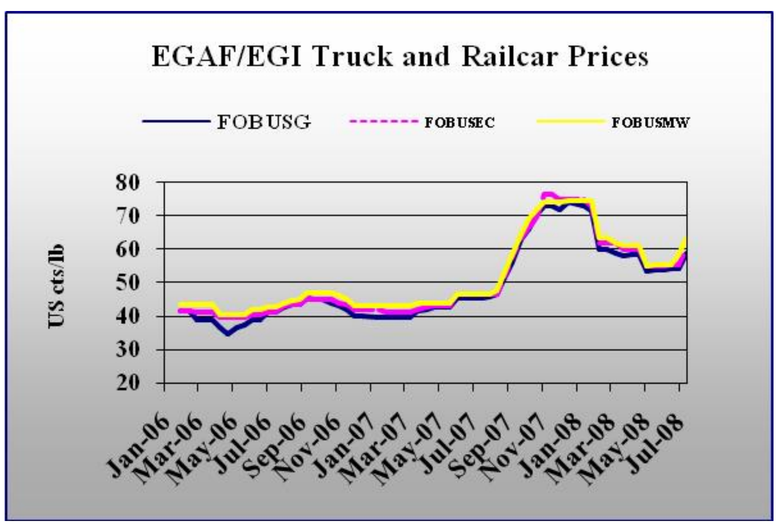
MEG Large Volume Spot



Large volume spot activity in the USG remains thin as domestic buyers continue to take contract volumes at price levels below those likely to attract potential sellers. Index related EGAF prices are estimated between 46 and 48.50 cts/lb depending on the established discount allotted to each customer, while most producers claim they would be hard pressed to sell barges below the 50 cts/lb mark FOB USG.

Bulk exports FOB USG remain an exercise in futility according to most traders that suggest a steep decline in Asian spot prices last week make it increasingly more likely volume could theoretically work back into the US. By Friday traders claimed offers CFR CMP dipped to new lows near $1,000/mt making netbacks FOB USG near 41 cts/lb. Spot values in Europe remained better supported through the week and assessed near Euro 800/mt CFR Rotterdam T2 (duty paid), which implies netbacks to the USG very near 50 cts/lb FOB, but it remains difficult to place large volumes in the market and Asian parcels still seem better suited to move from both a logistical and price standpoint.

MEG Small Volume Spot



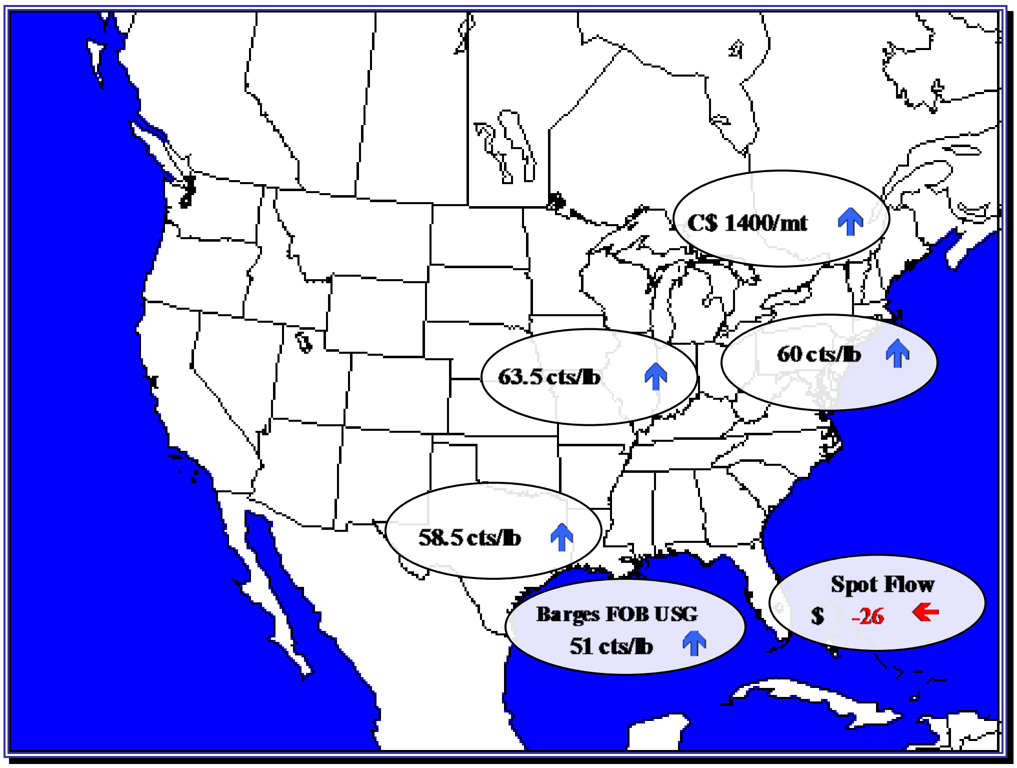
Small volume truck and railcar marketers report making no changes to established price levels as of last week and most, with few exceptions confirm targeting only marginal increases next month, although some buyers think easing price levels elsewhere in the world could prompt a reverse in market direction.

Prices in the **USG** edged slightly higher this month as a few of the more competitive sellers adjusted offers from lows between 54 to 55 cts/lb to between 57 or 58 cts/lb FOB USG, although those at the higher end of the selling range made few changes. Delivered netbacks for volume arriving in August also reflect similar lows of 57 to 59 cts/lb FOB USG.

Distributors and resellers in the **Midwest** also note few changes heading into next month, although as is the case elsewhere, most expect to target offers at least 2 cts/lb higher. Truck offers FOB Chicago were widely reported near or above 63 cts/lb and some suggest initial offers in August will begin nearer 65 cts/lb. One Midwest blender confirms buying two railcars for around 60 cts/lb delivered over the past week.

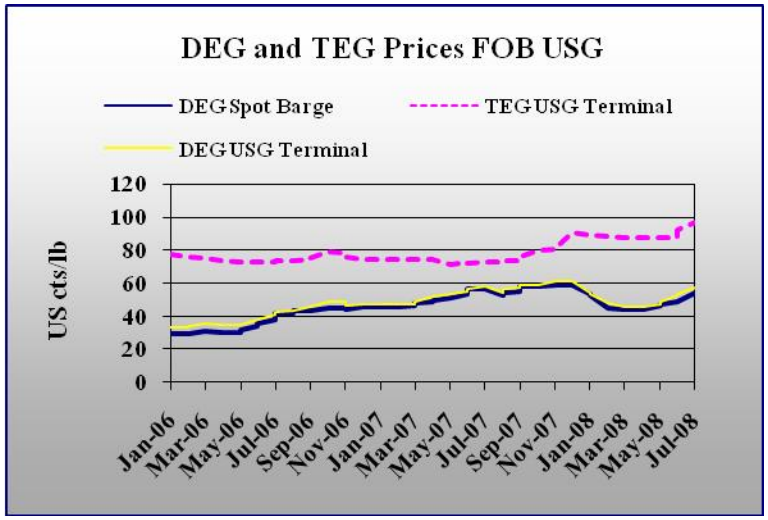
Price in the **Northeast** were again steady last week, and as in other regions the ultimate disposition of net offers in August remains a source of contention given the range of nominations, although most claim initial offers will probably only rise 2 cts/lb. As of Friday trucks remained quoted near lows between 64 and 65 cts/lb FOB New Jersey according to some observers.

North American MEG Price Averages



** Average of terminal prices and change from previous month indicated by directional arrow unless otherwise listed. Spot Flow indicates possible margin for spot movements from the USG to China. Negative values indicate estimated netbacks below estimated prices FOB USG.*

DEG



Production cuts continue to impact DEG availability and pricing in the Americas and elsewhere prompting another round of price increases due to take effect on August 1st. Although downstream demand in the key UPR end use market segment remains tepid due to ongoing economic malaise, supply constraints remain paramount and conditions seems likely to remain unchanged until ethylene cost based economics change once again. MEGlobal will move its benchmark up 4 cts/lb to 65 cts/lb in August after implementing a 5 cts/lb hike this month. Equistar issued a 5 cts/lb increase this month, although it then followed with another 5 cts/lb announcement effective July 15th. Old World announced a 4 cts/lb July nomination, but it then revised it to a whopping 14 cts/lb which it reportedly is carrying forward into next month. Shell Chemical announced a 10 cts/lb August hike following a 4 cts/lb increase this month. Huntsman will target a 7 cts/lb hike next month.

Large volume **spot barge** trade remains a source of conjecture with no reports of domestic end use buying activity, although several players suggested producers that cut overall operating rates have ventured into the market to accumulate some larger quantities at undisclosed price levels in the last week or two. While domestic end users report little interest in spot quantities and several claim offers over 50 cts/lb would generate little interest, other traders claim intra-producer business of late possibly involved bulk near the 50 cts/lb mark. Current netbacks for export oriented business to Asia remain under the 50 cts/lb mark as of last week.

US truck and railcar availability is snug according to regional resellers that note most suppliers have implemented some form of sales control as the reduction in glycol operating rates take their toll on domestic supply sparking pre-buying and position taking among some resellers. This month truck offers FOB USG moved roughly 5 cts/lb higher and as of last week competitive levels to distribution remain in the 58 to 59 cts/lb FOB USG range. Truck prices in the Northeast and Midwest were noted near or above 60 cts/lb FOB.

Asian activity thinned somewhat last week, although spot prices remain largely supported amid differing views regarding future market direction given declining energy values and ongoing logistical constraints in mainland China. Supply is still relatively snug as producer cuts impacted availability rather quickly, but demand in most large end use markets is still subdued. Last week large volume bulk spot prices were assessed more or less unchanged near or below $1,100/mt CFR CMP, with some buyers seeking prices as low as $1,080/mt but few producers apparently willing to meet those numbers. Domestic prices in China are also largely stable amid some uncertainty about the future. Offers ex-factory in the East were noted near CNY 8,100/mt and nearer CNY 8,600/mt in the Southern provinces. In the North and Northeast prices were deemed steady near CNY 9,000/mt.

European activity is still somewhat thin given regional holidays, but supply is snug and prices remain well supported according to traders. Spot bulk CIF Rotterdam T2 was assessed near or above Euro 800/mt last week prompting some discussion of imports from the Middle East and elsewhere, although as is usually the case finding buyers for large parcels remains problematic. Smaller volumes on a DDP basis are assessed at a significant premium near Euro 900/mt according to some.

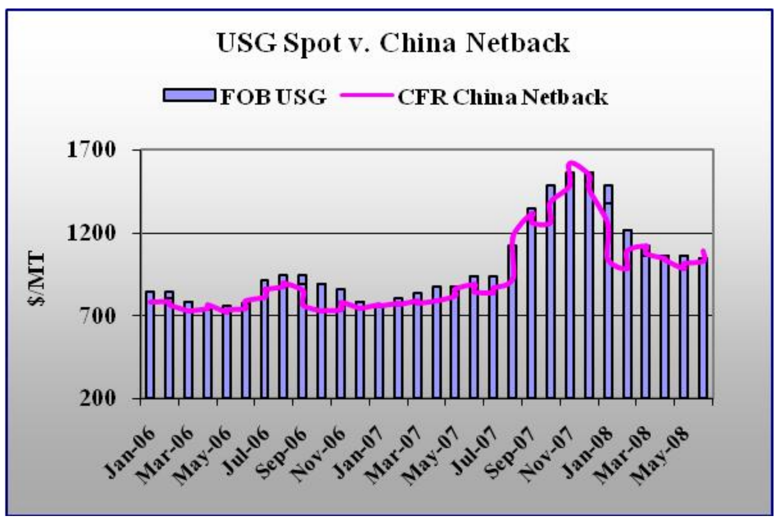
TEG

Domestic production cuts continue to have pronounced affects on TEG availability in the US prompting another round of increase nominations due to take effect in August. . Dow Chemical will move up 5 cts/lb next month to $1.11/lb after raising its benchmark 5 cts this month. Old World announced 2 cts/lb for July 1st following a 7 cts/lb nomination in June, although it later revised the July nomination to 12 cts/lb which it will continue to press through in August (which totals 19 cts/lb over the two months). Equistar moved up 5 cts/lb on July 1st after raising its prices 7 cts/lb in June as well, although it later nominated another 5 cts/lb increase effective July 15th. Shell Chemical will raise TEG prices 10 cts/lb in August following a similar hike this month (after rolling its prices in June). Huntsman will raise its prices 9 cts/lb next month. Net prices in the USG edged higher through the month as low end offers disappeared leaving competitive offers near or above 95 cts/lb to distributors FOB USG. Truck offers for delivery FOB USG in August are uniformly moving up at least 5 cts putting the lowest numbers above $1/gal as of next month according to buyers.

Canada

Seasonal activity in Canada remains tepid as might be expected, although regional resellers and end users expect to begin accumulating volume in the next month unless prices begin a sustained downward correction, in which case buying might be limited to just in time purchases among those with spot exposure. Next month contract prices are expected to move at least CAN 5 cts/kg higher in line with the most modest of nominations. At present small volume EGAF prices are assessed steady on either side of CAN $1.50/kg delivered in the Eastern provinces of Ontario and to a lesser degree Quebec.

Far East



A sustained downward correction in world crude markets that carried over into last week sent many buyers in the region to the sidelines, although the majority of sellers remain reluctant to meet lower bids given ethylene values remain high. Regional availability appears adequate with local downtime tempered by the startup of the Equate unit in Kuwait. While the EGS unit in Singapore reportedly came back up following its downtime, in Indonesia the Polychem plan it also due to take a turnaround next month. Downstream demand is still stifled by both cost pressures and reports of logistical constraints within China ahead of the Olympics. Contract prices will likely remain steady next month, although MEGlobal will seek a $40/mt increase to its Asian Contract Price in August raising its benchmark to $1,300/mt. SABIC and Shell will not change their benchmarks of $1,260/mt next month making the lone increase initiative somewhat tenuous. This month all three suppliers raised benchmarks $60/mt.

Spot prices CFR CMP early last week moved down $15 to $20/mt with bonded cargoes on Wednesday assessed near or just above $1,060/mt and dated deliveries reported between $1,055 and $1,060/mt. Later in the week both bonded and dated cargoes were assessed flat or in only slight backwardation near or under $1.050/mt. Chinese domestic markets also thinned and product flow seemed restricted ahead of the Olympics. Last week prices in the North were assessed under CNY 8,400/mt while values in the East and Northeast appeared somewhat better supported nearer CNY 9,100/mt. In the Southern provinces prices were assessed nearer CNY 9,200/mt.

Europe

Although seasonal activity remains tepid and many players continue to take summer holidays, prices in general remain well supported for the time being. Still, as prices elsewhere in the world remain comparatively lower many think downward price pressure is almost inevitable over the coming weeks. Several traders confirmed seeking spot volumes in Asia and the Middle East for delivery in August, although quantities fixed remain elusive. At present spot prices CFR Rotterdam T2 are assessed near or above Euro 800/mt with DDP values at a lofty premium near Euro 900/mt. Given recent price declines in Asia volume reportedly works into Europe with margins at present of at least Euro 50/mt (inclusive of duty). Earlier this month as discussions suggested regional buyers and sellers agreed to settle July contract benchmarks up Euro 60/mt at Euro 940/mt.

EO

Prices remain well supported as some producers continue to cut production given the high relative cost of ethylene, although with energy prices heading lower over the past week and spot ethylene prices in the USG dipping over 10% many think chances of heading much higher are dissipating. Last week spot ethylene delivered USG pipeline was reported in the very low 60 cts/lb range after reaching highs near 70 cts/lb. There were no new contract or benchmark announcements for August. As of last week most observers continue to report large customer prices in the mid to upper 60 cts/lb range (for 20 mln lbs or more), medium sized buyers near 70 cts/lb (10 to 20 mln lbs/yr), and smaller customers remain in the mid to upper 70 cts/lb range with ongoing reports of sales to small customers above 80 cts/lb.

PG

Although producers and major marketers remain steadfast in their desire to raise prices between 12 and 15 cts/lb next month as announced, some buyers and intermediaries think increases could be limited to around 10 cts/lb given both upstream and downstream conditions. Dow was among the first to announce a sizeable 15 cts/lb August hike for PO, PG, DPG and TPG as part of its corporate directive to move all commodity values up as much as 25%. Several other suppliers including Huntsman, Shell, Arch and Third Coast also announced 15 cts/lb, although Lyondell followed with a 12 cts/lb nomination. The impetus for suppliers remains feedstock costs and maintaining margins given spot refinery grade in the USG remained assessed above 70 cts/lb after reaching highs approaching 80 cts/lb before energy values corrected. Chemical and polymer grade benchmarks this month moved to 83.50 cts/lb and 85 cts/lb respectively. Buyers on the other hand contend current announcements appear too aggressive given the downward correction in crude and gasoline last week. Some also note lofty propylene derivative values appeared to negatively impact downstream demand over the previous months.

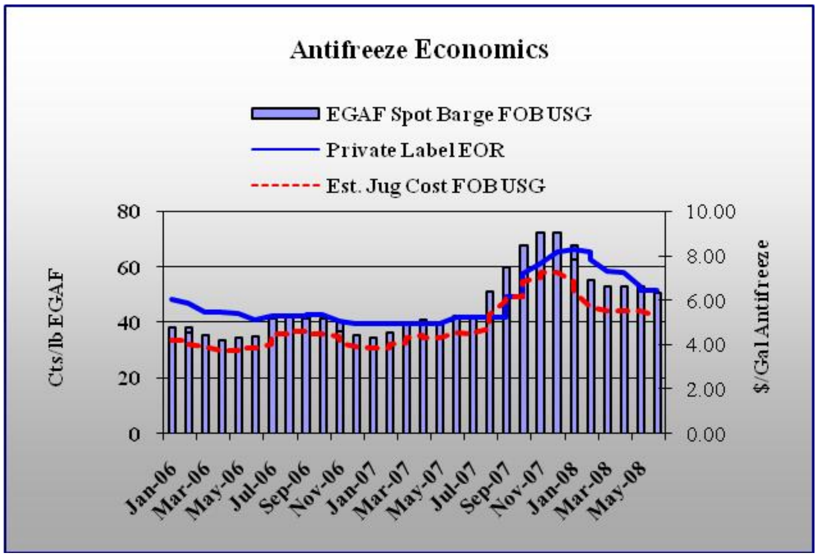
Price levels across the country remain well supported with some variation noted. Distributors in the **USG** note competitive PGI truck prices holding between 90 to 93 cts/lb FOB USG and August deliveries quoted at $1/lb or more. A few sellers confirmed offering volume in a wide range already reflecting next month's increases. Competitive PGUSP prices in the region remain between 95 and 97 cts/lb FOB USG this month and are due to go well above $1/lb in August. Regional distributors and end users in the **Midwest** report snug conditions and PGI offers at relatively healthy premiums to those in the USG. Several suppliers remain snug or otherwise out of material according to resellers. One local marketer is noted offering truck volumes of PGI for 98 cts/lb on a delivered basis. A few continue to note some volume available between 95 and 97 cts/lb FOB Chicago, but the amount available is limited. PGUSP supply is also constrained with one importer out of material following the force majeure declaration of its producer supplier in Spain. **Northeast** resellers note prices also trending higher next month with most targeting PGI offers slightly above $1/gal for August 1st. PGUSP is in a tighter range roughly 3 to 5 cts/lb higher according to some.

MPG Shutdowns				
Date	***Company***	***Location***	***Capacity***	*Details*

June 2007	Huntsman	Pt. Neches, TX	65,000	14 days. None 2008.
March 2008	Dow	Freeport, TX	159,000	T/R for 3 weeks
June 2006	Repsol	Terragona, Spain	50,000	T/R for 60 days
Q3 2007	Dow	Plaquemine, LA	190,000	T/R for 3 weeks
May 2006	Dow	Aratu, Brazil	84,000	T/R for 3 weeks
May 2006	Dow	Stade, Germany	170,000	T/R for 3 weeks
March 2008	Lyondell	Botlek, Netherlands	80,000	S/D for 6 weeks
Sept 2007	Lyondell	Bayport, TX	285,000*PO	T/R for 3 weeks
March 2007-	Nihon Oxirane	Chiba, Japan	100,000	Production curtailed
Feb-	Shell/CNOOC	Huizhou	60,000	Reduced rates rep
March 2008	Shell	Jurong, Singapore	70,000	T/R
April-May 2008	SK Oxichem	Ulsan, Korea	50,000	T/R, expansion.

Antifreeze Summary

US



Domestic demand is still seasonally slow according to most sellers, and some suggest those that had the ability to load up prior to price increases earlier in the summer have done so tempering the effect this month. Aside from slow seasonal conditions most large blenders also confirm OEM business is depressed as might be expected given automobile manufacturing woes. Still, costs remain elevated and most antifreeze makers continue to hold prices higher this month following implementation of increases meant to regain margin and at least one issued notice of a subsequent hike due to take effect next month. While blenders continue to push offers higher, net prices remain in a wider range as old inventory is still in circulation and widely available according to many downstream buyers. This month Shell Lubricants moved concentrate prices up 8%, while Valvoline and Prestone issued a similar 50 cts/gal concentrate and 30 cts/gal 50/50 nominations. Old World also raised concentrate prices 50 cts/gal higher and 50/50 up 30 cts/gal, (for most with 30 day notice requirements implementation of this hike and others reportedly took effect around mid month). Last week some observers claimed the company notified customers of another $1/gal increase that will take effect later in August.

Universal green jug prices across the country were reported in a wide range last week given most blenders moved offers 50 cts/gal higher but old inventory that doesn't reflect the increases remains on offer in many places. One regional **Midwest** blender reports selling few jugs this month within its going price range of $6.75/gal to $6.95/gal as one of its distributors that also sells for another blender claims it has old inventory enabling it to offer less than full truckloads of universal green jugs as low as $6.47/gal delivered locally. Other regional sellers confirm the competitive jug price form other sellers remains in the mid $6/gal range on a delivered basis as well. One noted another national blender moving jugs for $6.49/gal delivered last week. The same supplier was noted offering bulk for $5.59/gal delivered EOR. **Northeast** prices remain relatively high according to regional marketers, although most also admit demand waned after they implemented 50 cts/gal increases this month. One blender that raised its universal jug prices on the 21st above $7/gal delivered locally claimed sales remained thin last week following pre-buying (although it also suggested pre-buying was less pronounced this time suggesting customers might be flush with product or otherwise reluctant to believe prices will continue to rise). Another blender active in the Northeast confirmed it moved delivered jug prices up 50 cts to $6.79/gal mid month. **USG** universal green jugs are also reported near lows in the upper $6/gal range delivered with bulk in some instances near $6/gal.

Canada

Antifreeze sales in much of Canada remain relatively uneventful given most sellers report holding offers steady over the past few months while blenders in the US adjusted down and then back up to compensate for volatile EGAF costs. One national blender confirms maintaining posted jug prices in the East near CAN $7.60/gal delivered, although it does admit net prices in the West remain lower on a relative basis. Other regional blenders in the East were noted with more competitive offers according to some observers that claim a few dipped into the low to mid CAN $7/gal range delivered Ontario in the past few weeks as more aggressive offers reportedly emanated from the US.

NOTICES

- Chemical Intelligence is proud to release its new **Solvents Report** service covering a wide array of markets including acetone, MEK, MIBK, IPA, as well as both aliphatic and aromatic solvents in both the US and Canada. For a free copy and more information please contact April Hobbs at (281) 444-2872 or ahobbs@chemicalintelligence.com.

Glycol Pricing

	May			June			July		
US (FOB in cts/lb)									
Contract									
Net EGF	51.00	-	58.00	51.00	-	58.00	55.00	-	63.00
Net EGI	49.00	-	57.00	49.00	-	57.00	53.00	-	62.00
Net EGAF	48.50	-	54.50	48.50	-	54.50	52.50	-	59.50
Net PGI	73.00	-	78.00	78.00	-	83.00	78.00	-	83.00
Net PGUSP	82.00	-	87.00	87.00	-	92.00	87.00	-	92.00
Spot									
MEG USG Barge	52.00	-	54.00	48.00	-	49.00	50.00	-	52.00
MEG USG Export	47.00	-	49.00	45.00	-	46.00	44.00	-	45.00
MEG USG Terminal	53.00	-	55.00	53.50	-	55.00	57.00	-	60.00
MEG USEC Terminal	53.00	-	57.00	54.00	-	57.00	58.00	-	62.00
MEG Chicago Terminal	54.00	-	57.00	57.00	-	60.00	62.00	-	65.00
DEG USG Barge	46.00	-	48.00	48.00	-	50.00	53.00	-	55.00
DEG USG Terminal	48.00	-	50.00	53.00	-	54.00	58.00	-	60.00
TEG USG Terminal	84.00	-	90.00	90.00	-	93.00	95.00	-	99.00
PGI USG Terminal	75.00	-	79.00	82.00	-	84.00	90.00	-	94.00
PGUSP USG Terminal	84.00	-	86.00	89.00	-	91.00	97.00	-	99.00
PGI USEC Terminal	77.00	-	81.00	82.00	-	86.00	92.00	-	96.00
PGUSP USEC Terminal	84.00	-	89.00	89.00	-	94.00	98.00	-	102.00
Canada (CAN$/MT)									
Contract									
Net EGAF	1250	-	1300	1250	-	1300	1350	-	1400
Spot									
EGAF FOB E. Can	1250	-	1350	1250	-	1350	1350	-	1450
EGI FOB E. Can	1300	-	1450	1300	-	1450	1400	-	1550
EGAF/EGI FOB W. Can	1350	-	1550	1350	-	1550	1450	-	1650
Asia (US$/MT)									
Contract									
EGF Contract List	1240	-	1240	1200	-	1200	1260	-	1260
Spot									
EGF CFR CMP	1090	-	1100	1090	-	1100	1040	-	1050
EGF CFR N.E. Asia	1080	-	1090	1080	-	1090	1030	-	1040
EGF USG CMP Netback	1010	-	1020	1000	-	1010	950	-	960
EGF USG NE Asia Netback	1005	-	1015	995	-	1005	945	-	955
DEG CFR CMP	1110	-	1120	1100	-	1110	1080	-	1090
Europe (Euro/MT)									
Contract NWE	890	-	890	880	-	880	940	-	940
Spot NWE	720	-	730	740	-	750	800	-	810
Freight (5,000mt exports, barge used for upcharge)									
USG to N.E. Asia (US$/MT)	75			85			85		
USG to China Main Port (US$/MT)	80			90			90		
USG to N.W. Europe (US$/MT)	55			55			55		
N.W. Europe to USG (US$/MT)	40			40			40		
USEC MEG Upcharge (cts/lb)	3.5-5			3.5-5			3.5-5		
USWC MEG Upcharge (cts/lb)	4-5.5			4-5.5			4-5.5		

Antifreeze Prices in US$/gal				
	Posted	**Net EOR**	**Net WOR**	**Net CAN** (CAN $/Gal)
6x1s				
Branded	7.25 - 7.90	6.10 - 6.90	6.20 - 7.00	7.35 - 7.75
Private label	7.20 - 7.60	6.05 - 6.80	6.15 - 6.90	7.35 - 7.60
PG-based	7.75 - 8.60	7.25 - 8.00	7.35 - 8.10	N/A
Non-virgin	7.00 - 7.40	6.05 - 6.50	6.15 - 6.60	N/A
DRUMS				
Branded	6.75 - 7.00	6.10 - 6.75	6.20 - 6.85	7.10 - 7.60
Private label	6.50 - 6.75	5.80 - 6.50	5.90 - 6.60	7.00 - 7.50
PG-based	N/A	6.80 - 7.10	6.80 - 7.20	N/A
Non-virgin	N/A	5.75 - 6.40	5.85 - 6.50	N/A
BULK				
Branded	6.15 - 6.60	5.80 - 6.50	5.90 - 6.60	6.50 - 6.80
Private label	6.10 - 6.25	5.50 - 6.20	5.60 - 6.30	6.25 - 6.60

- **EOR** = del. East of Rockies, **WOR** = del. West of Rockies, **CAN** = del. Canada
- Antifreeze prices usually do not include premium brands such as Prestone, Peak and Zerex
- All Canadian prices (CAN) are quoted in Canadian dollars (current exchange rates at time of publication are listed in the exchange table near the end of the report), jugs reflect 4-litres, all other prices reflect litres

Shipments of Glycols Reported						
Product	**Ship**	**Quantity**	**Source**	**Discharge**	**Lifting**	**Freight US$/mt**
DEG	Rachel B	*1,350*	USG	NWE	2H Apr	*N/A*
MEG	N/A	*3,000*	Rotterdam	China	2H Mar	*N/A*
MEG	N/A	*3,000*	Iran	India	2H Feb	*N/A*
DEG	N/A	*2,000*	USG	China	1H Feb	*N/A*
DEG	Chembulk Savannah	*2,500*	USG	China	2H Dec	*119*

*****Spot shipments listed are not exhaustive and freight rates are in some cases estimated. *Listings in Italics are reported but unconfirmed.*

^Reported as contract volume moving on spot ship

NOTICES

- Please let us know if you did not receive a free sample of **detailed MEG import/export data** sent via e-mail in the form of an Excel spreadsheet. The only one of its kind, we are now offering this unique information on a yearly subscription basis. If you have questions or any interest please contact us as soon as possible.

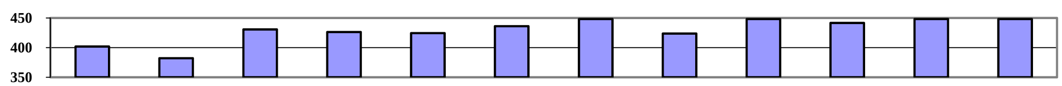
Planned Capacity in 1,000 MT/yr

Company	Location	Capacity	Date	
Jam Petrochemicals (10th Olefins)	Iran	443	2008	
Kharg Island	Iran	500	2008	
Yanbu	Yanpet, Saudi Arabia	700	2008	
Arvand Petrochemicals (8th Olefins)	Iran	608	2008	
Equate II	Kuwait	635	2008	
Olefins 11	Assaluyeh, Iran	700	2008	
Jubail Petrochemical (expansion 3)	Jubail, Saudi Arabia	600	2008	
Sharq 4	Saudi Arabia	600	2008	
Sinopec Tianjin	Tianjin, China	420	2009	Using Dow Meteor process
Sinopec Zhenhai	Ningbo, China	650	2009	Using Dow Meteor process
Honam	Lotte Daisan, Korea	400	2009	Using Shell Omega process
Sumitomo/Saudi Aramco	Rabigh, Saudi Arabia	600	2009	
Shell Chemical	Jurong, Singapore	750	2010	
Sibur	Dzerzhink, Russia	80	2010	
Indian Oil	Panipat, India	300	2010	
Sonatrach	Arzew, Algeria	410	2012	Planning
Equate III	Kuwait	410	2012	Planning

THE AMERICAS 2008

Estimated Days of Production Lost

COMPANY	Location	KMT/YR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Remarks
United States															
Dow	Seadrift, TX	283													Planned T/R delayed until Jan 2009
Dow	Taft 1, LA	385										14			Planned T/R
Dow	Taft 2, LA	385													
Eastman	Longview, TX	105													
Equistar	Bayport, TX	265			31	4									Planned T/R
Formosa	Point Comfort, TX	300					21	5	5						Reduced rates reported
Huntsman	Port Neches, TX	285	31	29	5	5	4	4	4	4	4	4	4	4	RR. Maximizing EOD.
Old World	Clear Lake, TX	315				17									Planned T/R
PD Glycol	Beaumont, TX	330					20								Planned T/R
Shell	Geismar 1, LA	0													
Shell	Geismar 2, LA	200	10							15					Unplanned outage
Shell	Geismar 3, LA	200										23			Planned T/R
Canada															
MEGlobal	Ft Saskatchewan, AB	320													
MEGlobal	Prentiss 1, AB	300				14									T/R delayed until 2008.
MEGlobal	Prentiss 2, AB	350						14							Planned T/R
Shell	Scotford, AB	450									23				Planned T/R
Mexico															
Idesa	Morelos	200													
Pemex	Morelos	250	10												Extended T/R
Polioles	Lerma	110													S/D indefinitely
Brazil															
Oxiteno	Camacari-Bahia	285													
Oxiteno	Maua	25													
Venezuela															
Pralca	Jose	95	5	5	30	5	5	5	5	5	5	5	5	5	RR, Cat change Mar 08
Estimated production lost			38	24	34	0	0	0	0	0	0	0	0	0	
Regional Total Capacity Max		**5,438**	**415**	**429**	**419**	**453**	**453**	**453**	**453**	**453**	**453**	**453**	**453**	**453**	



ASIA 2008

Estimated Days of Production Lost

COMPANY	Location	KMT/YR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Remarks
Australia															
Huntsman	Botany Bay	19													
China															
BASF/Yangzi	Nanjing	300			21										Planned T/R
Beijing Dongfang Chem	Beijing	40													
Beijing Dongfang Chem	Yanshan	60			6	14									Planned T/R
Beijing Dongfang Chem	Yanshan	220													
Sinopec Beijing	Yanhua	80													
Fushun Petrochemicals	Fushun	42					14								Planned T/R
Jilin Chemicals	Jilin	159					16								Planned T/R
Liaoyang Petrochemicals	Liaoyang	50													
Liaoyang Petrochemicals	Liaoyang	150													
Sinopec Shanghai	Jinshan, Shanghai	230					7								Last T/R Jul 07
Shell/CNOOC	Nanhai	320													
Maomin	Maomin	100						15							Reduced rates after fire.
Sinopec Yangzi	Yangzi	260				20	14								Planned T/R
Tianjin Petrochemical	Tianjin	42													
Xingiang Ethylene	Xingiang	40													
Shanghai Petrochem	Jinshan, Shanghai	380						7	7						RR.
India															
Indian Glycols	Kashipur	100													Last T/R Feb 07, Exp to 120KMT
IPCL	Baroda	15													
IPCL	Nagathane	45													
IPCL	Gandhar	188													Last T/R Sep 07
SM Dyechem		80													
Nocil	Bombay	15													
Reliance	Hazira 1	125													Last T/R Dec 07
Reliance	Hazira 2	125													
Reliance	Hazira 3	120													
Indonesia															
Polychem	Merak 1	90													
Polychem	Merak 2	120													
Japan															
Mitsubishi	Kashima	267	11	10	11	10	11								Last T/R Jul 07
Mitsui Chemical	Chiba	145													
Mitsui Toatsu	Senboku	40													
Nippon Shokubai	Chidori	100													
Nippon Shokubai	Ukishima	80													
Nisso Petrochemical	Chiba Goi	100													
Nisso Petrochemical	Yokkaichi	80													
Korea															
Honam Petrochemicals	Yeochon 1	120													Last T/R Oct 07
Honam Petrochemicals	Yeochon 2	120													Last T/R Oct 08
Honam Petrochemicals	Yeochon 3	160													Last T/R Oct 09
Lotte Daesan	Sosan 1	125													
Lotte Daesan	Sosan 2	250													Last T/R Apr 07
Samsung General Chem	Sosan	100													Last T/R May 07
North Korea State Plant	Payangtang	8													
Malaysia															
Optimal	Kerteh, Terengganu	365													
Singapore															
Ethylene Glycols Sing.	Ayer Merbau	122						21							Planned T/R
Multikarsa Investama	Singapore	300													
Taiwan															
China Man Made Fibre	Kaohsiung	130													Last T/R Nov 07
Nan Ya Plastics Corp.	Unit 1 Mai Liao	350													Last T/R Sep 07
Nan Ya Plastics Corp.	Unit 2 Mai Liao	350													Last T/R Oct 07
Nan Ya Plastics Corp.	Unit 3 Mai Liao	350													Last T/R Oct 07
Nan Ya Plastics Corp.	Unit 4 Mai Liao	700	14												Planned T/R
Oriental Union Chemical	Kaohsiung	200													
Thailand															
PTT	Map Tha Phut	300													Last TR Feb 07
Estimated production lost			35	7	9	24	31	18	7	0	0	0	0	0	
Regional Total Capacity Max		**8,377**	**663**	**691**	**689**	**674**	**667**	**680**	**691**	**698**	**698**	**698**	**698**	**698**	

MIDDLE EAST 2008

Estimated Days of Production Lost

COMPANY	Location	KMT/YR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Remarks
Saudi Arabia															
SABIC/Mitsubishi	Sharq I	500													
SABIC/Mitsubishi	Sharq II	500													
SABIC/Mitsubishi	Sharq III	500													
Yanbu/Mobil	Yanbu, Yanpet I	400													
Yanbu/Mobil	Yanbu, Yanpet II	420													
Yanbu/Mobil	Yanbu, Yanpet III	625													
Jubail United	Jubail	575													
Jubail United	Jubail II	630													
Kuwait															
Equate	Shuaiba	400	15												T/R
Equate	Shuaiba	400	31	29	31	30	31	30	31	30	15				New Unit.
Qatar															
QPC	Umm Said														
Iraq															
Techcorp.	Mussayed														
Iran															
NPC	Arak	105													
NPC	Marun, Bandar Imam	430													
NPC	Assaluyeh	400													
Turkey															
Turkey Petkim	Aliaga	100													
Estimated production lost			16	0	0	0	0	0	0	0	0	0	0	0	
Regional Total Capacity Max		**5,985**	**482**	**499**	**499**	**499**	**499**	**499**	**499**	**499**	**499**	**499**	**499**	**499**	

EUROPE 2008

Estimated Days of Production Lost

COMPANY	Location	KMT/YR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Remarks
Belgium															
BASF	Antwerp	350				14									Planned T/R.
Ineos	Antwerp	320		14											Planned T/R.
Bulgaria															
Neftochem	Burgas	90													
France															
Ineos	Lavera	8						14							Planned T/R
Germany															
BSL	Schkpau	65													
Clariant	Gendorf	140									14				Planned T/R.
Ineos	Koln	160				14									Planned T/R.
Italy															
Enichem	Gela	55													
Enichem	Priolo	30													
Netherlands															
Dow	Terneuzen	170													Next T/R 2008.
Shell	Moerdijk	155							14						Last Jun 07
Poland															
Petrochemia	Plock	60													
Romania															
Arpechim	Pitesti	25													
Petrobrazi	Brazi	24													
Slovakia															
Slovnaft	Bratislava	42													
Spain															
IQA	Tarragona	70													
Sweden															
Akzo Nobel	Stenungsund	3													
U.K.															
Dow	Wilton	270													Next T/R 2008.
CIS (various)		250													
NKNK	Nizhnekamsk	150													
JSC Sibur	Dzerzhink	120													
Estimated production lost			0	0	0	6	0	12	12	0	12	0	0	0	
Regional Total Capacity Max		**2,557**	**213**	**213**	**213**	**207**	**213**	**201**	**201**	**213**	**201**	**213**	**213**	**213**	

Current Exchange Rates		
Currency	***USD/1 unit***	***1 unit/USD***
Canadian Dollar	$0.98	$1.02
Chinese Yuan Renminbi	$0.15	$6.83
Euro	$1.57	$0.64
British Pound	$1.99	$0.50
Japanese Yen	$0.01	$107.89
Mexican Peso	$0.10	$10.12

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