

Version: June 20, 2022 – July 01, 2022



Contents

Manufacturing Purchasing Managers' Index (PMI)	1
Spot Market Analysis	2
Main Suppliers' Offer	
Raw Materials Analysis	
Import and Export Data	
Downstream Analysis	
Market Outlook	

Version: June 20, 2022 - July 01, 2022



Manufacturing Purchasing Managers' Index (PMI)

Southeast Asia

In June, the manufacturing sector of ASEAN (Association of Southeast Asian Nations) showed growth in output and improvement in operating conditions compared to the previous month. However, firms in manufacturing industry also faced the renewed contractions in buying activity and employment as well as a drop in new business from abroad. These factors drove the manufacturing Purchasing Managers' Index (PMI) of ASEAN countries to went down slightly to 52.0% in June, which indicated a continuing slight ease in growth momentum.

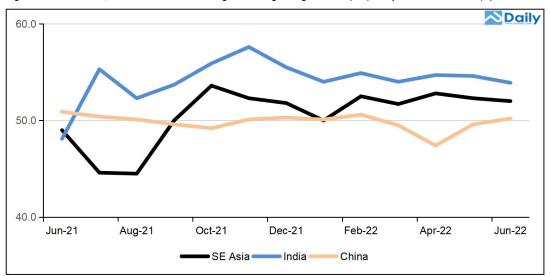
India

India had a manufacturing PMI of 53.9% in June, which was down by 0.7% compared to May, marking the 12th consecutive month of its manufacturing PMI expansion be above 50%. Although India's manufacturing sector is still expanding, its manufacturing PMI figure in June was dragged down by softer increases in production, factory orders, stocks of purchases and employment, as clients and businesses were restricting their spending in the face of elevated inflation.

China

In June, manufacturing firms in China recovered their production in a rapid pace, and the market demand was released, which had been suppressed because of the pandemic. With the continuous improvement of the epidemic control situation in China, the overall economy showed a trend of recovery. Therefore, China's manufacturing PMI climb up to 50.2% in May, up by 0.6% from the previous month, meaning the Chinese manufacturing sector returned to expansion stage.





Notes: If PMI above 50 percent, it reflects the overall economy is expanding; if less than 50 percent, it reflects the overall economy is in recession.

Source: S&P Global, National Bureau of Statistics of People's Republic of China.

Version: June 20, 2022 - July 01, 2022



Spot Market Analysis

Market Overview

(1 USD = 6.70 CNY)

TDI

Southeast Asia (SEA or SE Asia): In the early July, the TDI market in Southeast Asia remained stable. The market prices stayed around USD 2,450 - 2,650/tonne CIF on July 01, up by USD 0-50/tonne than the prices on June 17. As the traditional off-season has come, local demand from downstream industry was still weak during this fortnight, especially for sponges and upholstered furniture industry.

China: On July 01, China TDI market held steady with market prices of CNY 17,300-17,800/tonne (equal to USD 2,285 - 2,351/tonne). Supply for TDI was stable, but there was no significant sign of improvement from downstream demand.

Asia TDI Production

Table 1 Asia TDI Plants Operation Dynamics

Supplier	Location	Capacity (Kt/a)	Bi-Weekly Average Operation Load
Covestro (China) Co., Ltd.	Shanghai, China	310	50%. Shut down for maintenance from June 25.
Shanghai BASF Polyurethane Co., Ltd.	Shanghai, China	160	Around 100%.
Wanhua Group	Yantai, Shandong	300	100%.
Wanhua Fujian (Formerly known as SEEC)	Fuzhou, Fujian	100	20%. The facility is restarting and operation load is expected to return soon.
Cangzhou Dahua Group Co., Ltd.	Hebei, China	150	100%. Normal operation.
Gansu Yinguang Chemical Industry Group Co., Ltd.	Gansu, China	120	0% load, under maintenance.
Yantai Juli Isocyanate Co., Ltd.	ntai Juli Isocyanate Co., Ltd. Shandong, China		0%. the TDI unit in Yantai was shut down for maintenance on May 16, and it has not started yet.
Xinjiang Juli Co., Ltd	Xinjiang, China	150	100%.
Lianshi Chemical	Huludao, Liaoning	50	0% load, under maintenance.
Total capacity in Ch	ina		1,420
Avg. Operation Loads in	n China		66% (in two-thirds of June)
Mitsui Chemicals & SKC Polyurethanes Inc.	Omuta, Japan	120	50% load. Restarted at the end of June.
BASF Urethane Co., Ltd.	Yeosu, South Korea	160	100%.
Hanwha Chemical (KPX Fine Chemical)	Yeosu, South Korea	150	33%. Single line operation.
OCI Company Ltd.	Kunsan, South Korea	50	100%.

Version: June 20, 2022 - July 01, 2022



Avg. Operation Loads		69% (in two-thirds of June)	
Total Capacity in Asia and Mic	ddle East		2,207
Sadara	Al Sharqiya, Saudi Arabia	200	100%.
KARUN	BIK Port (BANDAR IMAM KHOMEIN)	40	0%. Device in shutdown due to carbon monoxide supply problem.
Gujarat Narmada Valley Fertilizer Company Limited	Bharuch, India	50	100%. Normal operation.
Gujarat Narmada Valley Fertilizer Company Limited	Dahej, India	17	100%. Normal operation.

Polymeric MDI (PMDI)

In Southeast Asia, the PMDI market dropped down slightly in the reporting period. The mainstream offers in SE Asia were around USD 2,300 – 2,350/tonne CIF with cargoes from Japan, South Korea and China suppliers on July 01, down by USD 50/tonne than the prices on June 17. There was a new supplier called Arabic Sabic company which offer PMDI with the price lower than the mainstream offers, but its sales volume is low. Overall downstream demand was weak, especially for construction industry. And the rainy season exacerbated this trend.

In China, the PMDI market dropped down a bit in previous two weeks. List prices in July from mainstream manufacturers were flat or slightly increased due to the upcoming maintenance plan. But for downstream industries the demand was weak and there were mainly small order inquiries based on rigid needs.

On July 01, for Wanhua-brand, market prices were around CNY 18,000/tonne (equal to USD 2,377/tonne FOB China excluding taxes), down by USD 67/tonne compared with the price on June 17 (considering exchange rate changes). For other-brands, market prices were around CNY 17,500/tonne (equal to USD 2,311/tonne FOB China excluding taxes), down by USD 40/tonne compared with the prices on June 2.

In India, the PMDI market remained stable in the reporting period. The CIF offers for India market decreased to USD 2,300-2,450/tonne, down by USD 0-50/tonne than the prices on June 17.

Monomeric MDI (MMDI)

MMDI prices in **Southeast Asia** narrowed the range in previous two weeks, and mainstream price offers were concentrated around USD 2,700-2,800/tonne on July 01.

China MMDI market went up in the reporting period. The domestic market price was around CNY 22,800-23,500/tonne (equal to USD 3,011 - 3,104/tonne) on July 01, up by USD 171-198/tonne compared with the price on June 17 (considering exchange rate changes).

MMDI prices in **Taiwan, China** remained stable in the reporting period. The offers stayed around USD 2,750-2,800/tonne CIF from China, South Korea and Japan on July 01, with no change compared with the prices on June 17.

Version: June 20, 2022 - July 01, 2022



Operation loads of plants from manufacturers are as below:

Table 2 Asia MDI Plants Operation Dynamics

Supplier	Supplier Location		Bi-Weekly Average Operation Load
Wanhua Chemical (Ningbo) Co., Ltd.	Ningbo, China	1,200	90%. Normal operation.
Wanhua Chemical Group Co., Ltd.	Yantai, China	1,100	80%, Normal operation.
Covestro	Shanghai, China	600	100%, Normal operation.
Chongqing BASF	Chongqing, China	400	90%. Normal operation.
Shanghai Lianheng Isocyanate Co., Ltd.#	Shanghai, China	350	90%, Normal operation.
Shanghai claimeng isocyanate co., ctd.#	Shanghai, China	240	90%, Normal operation.
Shanghai BASF Polyurethane Co., Ltd.*	Shanghai, China	210	100%. Maintenance start from early July and lasted for 3 weeks.
Huntsman (Shanghai) Polyurethane Co.,	Shanghai, China	160	100%. Maintenance will start from early July.
Ltd.*	Shanghai, China	240	100%. Maintenance will start from early July.
Tosoh (Ruian) Co., Ltd.*	Zhejiang, China	80	90-100%. Normal operation. Maintenance will start from August 3 and last for 30-35 days.
Total capacity in China (Mot	ner Liquor)		3,890
Total outputs in Chi	na		156.9(in two-thirds of June)
Avg. Operation Loads in	China		88.7% (in two-thirds of June)
Tosoh Corporation	Nanyo, Japan	400	70%. 130 kt/a units is in trial run.
Kumho Mitsui Chemicals Inc.	Yeosu, South Korea	410	90-100%. Normal operation.
BASF Urethane Co., Ltd.	Yeosu, South Korea	250	80-90%. Normal operation.
Sadara Chemical Company	Saudi Arabia Jubail	400	90%. Normal operation.
Karun	BIK Port	40	0%. Device will in operation from early June
Total capacity in Asia (Mo	ther Liquor)		5390
Total outputs in A	Asia		211.8 (in two-thirds of June)
Avg. Operation Loads	in Asia		86.5% (in two-thirds of June)

- "#" means that Shanghai Lianheng only has the synthesis facility
- "*" means that BASF, Huntsman and Tosoh
 (Ruian) only have the splitters.
- Total capacity is calculated on the capacities of synthesis facilities.

Spot Prices

Table 3 SE Asia & India TDI Market Prices Comparison (USD/tonne, drum and CIF, Chinese Mainland is FOB price)

Country	July 01	June 17	Change
Indonesia	2,450-2,650	2,450-2,600	0, 50
Malaysia	2,450-2,650	2,450-2,600	0, 50
Singapore	2,450-2,650	2,450-2,600	0, 50
Thailand	2,450-2,650	2,450-2,600	0, 50
India	2,550-2,650	2,300-2,400	250, 250
Chinese Mainland (CNY/tonne)	17,300-17,800	17,200-17,600	100, 200

Note

- Market prices: prices largely heard in the market from distributors and traders to end-users;
- 2. China prices: East China (RMB/tonne, Drum, delivery);

Table 4 SE Asia, India, Taiwan China Polymeric MDI Market Prices Comparison (USD/tonne, drum and CIF, Chinese Mainland is FOB

price)

Version: June 20, 2022 - July 01, 2022



Country	July 01	June 17	Change
Thailand	2,300-2,350	2,350-2,400	-50, -50
Indonesia	2,300-2,350	2,350-2,400	-50, -50
Vietnam	2,300-2,350	2,350-2,400	-50, -50
Malaysia	2,300-2,350	2,350-2,400	-50, -50
India	2,300-2,450	2,300-2,500	0, -50
Chinese Mainland (CNY/tonne)	17,500-18,000	17,800-18,500	-300, -500
Chinese Mainland	2,311-2,377	2,351-2,444	-40, -67

Table 5 SE Asia, Taiwan China Monomeric MDI Market Prices Comparison (USD/tonne, drum and CIF, Chinese Mainland is FOB price)

Region/Country	July 01	June 17	Change
Southeast Asia	2,700-2,800	2,600-2,800	100, 0
Taiwan, China	2,750-2,800	2,750-2,800	0, 0
Chinese Mainland (CNY/tonne)	22,800-23,500	21,500-22,000	1300, 1500

Main Suppliers' Offer

Table 6 TDI Suppliers' Offer in SE Asia & India (USD/tonne, drum, CIF)

Region/Country	Japan	South Korea	China
Southeast Asia	2,450-2,500	2,600-2,650	2,500-2,550
India	2,550-2,650	2,550-2,650	2,550-2,650

Note:

- 1. All prices are the latest offers;
- 2. Local supplier TDI price: GNFC's offer (ex-work, drum);
- 3. Local supplier polymeric MDI price : BASF's offer (ex-work, drum);
- 4. "--"means prices unheard or yet to be disclosed;

Table 7 MDI Suppliers' Offer in SE Asia, India, Taiwan China (USD/tonne, drum, CIF)

Region/Country	Product	Japan	South Korea	China
Southeast Asia	Polymeric MDI	2,300-2,350	2,300-2,350	2,300-2,350
India	Polymeric MDI	2,300-2,450	2,300-2,450	2,300-2,450
Southeast Asia	Monomeric MDI	2,700-2,800	2,700-2,800	2,700-2,800
Taiwan, China	Taiwan, China Monomeric MDI		2,750-2,800	2,750-2,800

Version: June 20, 2022 - July 01, 2022



Raw Materials Analysis

Toluene

Asia toluene price went down to USD 1211/tonne FOB South Korea on July 01, 2022, down by USD 45/tonne compared with that on June 17, 2022.

Benzene

Asia benzene decreased to USD 1257/tonne FOB South Korea on July 01, 2022, down by USD 88/tonne compared with that on June 17, 2022.

Figure 2 SE Asia and India TDI Price Trend & Asia Toluene Trend (USD/tonne)

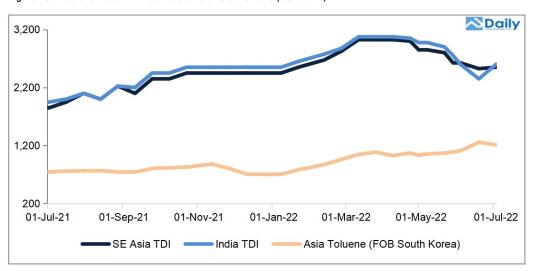
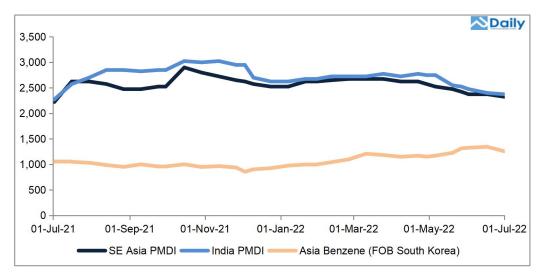


Figure 3 SE Asia and India Polymeric MDI Price Trend & Asia Benzene Trend (USD/tonne)



Note:

- 1. SE Asia price: TDI price range based on CIF;
- 2. India price: average TDI spot price, CIF India;
- 3. Asia Toluene price: FOB South Korea;

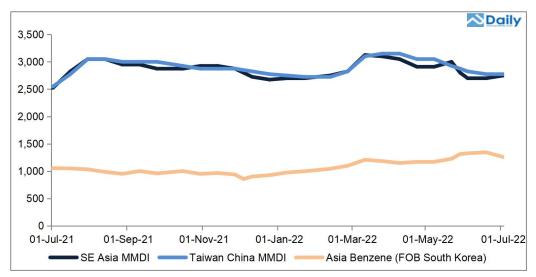
Note:

- 1. SE Asia price: polymeric MDI price range based on CIF;
- 2. India price: average polymeric MDI spot price, CIF India;
- 3. Asia Benzene price: FOB South Korea;

Version: June 20, 2022 - July 01, 2022



Figure 4 SE Asia and Taiwan China MMDI Price Trend & Asia Benzene Trend (USD/tonne)



Note

- SE Asia price: pure MDI price range based on CIF;
- 2. Taiwan China price: average pure MDI spot price, CIF Taiwan China;
- 3. Asia Benzene price: FOB South Korea;

Import and Export Data

Table 8 Southeast Asia & India TDI Imports from China, Japan and South Korea in 2022 (Tonnes)

a) China

Country	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Indonesia	3,405	1,125	2,385	1,360	1,890							
Belgium	2,997	0	0	0	0							
Brazil	2,746	895	4,037	1,696	1,133							
Taiwan, China	2,704	410	1,000	650	685							
Russia	2,144	960	640	2,489	3,560							
Vietnam	1,655	2,440	1,925	2,609	1,684							
Mexico	1,517	500	306	320	40							
United Arab	1,220	320	1,220	2,080	1,060							
Emirates	1,220	320	1,220	2,060	1,000							
India	1,160	920	1,480	1,060	1,160							
Kenya	1,120	460	820	1,300	1,240							
Others	17,621	8,929	17,281	16,419	10,954							
Month Total	38,288	16,960	31,094	29,984	23,406							

b) Japan

Country	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Indonesia	1,775	2,416	2,396	579	280							
Vietnam	797	2,078	1,379	220	-							
Malaysia	681	681	780	25	3							
India	100	640	1,160	0	0							
Taiwan	320	447	287	280	168							

Version: June 20, 2022 - July 01, 2022



Thailand	665	519	868	346	123	
Philippines	620	160	740	0	0	
Peru	200	0	0	0	0	
Mexico	147	255	119	24	0	
Pakistan	140	0	0	0	0	
Others	297	774	1,213	259	118	
Month Total	5,742	7,969	8,942	1,733	692	

c) South Korea

Country	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
U.S.A	165	1,543	0	3,003	0							
Turkey	4,508	1,425	2,834	3,661	1,605							
Indonesia	1,968	2,842	3,130	2,479	2,265							
Vietnam	1,310	1,542	1,606	1,820	1,526							
India	1,120	1,240	2,020	1,880	1,860							
Belgium	5,040	0	7,941	62	4,643							
Russia	340	40	40	60	140							
Nigeria	800	360	1,020	380	920							
Others	5,725	8,850	9,685	9,633	5,962							
Month Total	20,977	17,843	28,277	22,977	18,921							

Table 9 Southeast Asia, India, Taiwan Polymeric MDI Imports from China, Japan and South Korea in 2022 (Tonnes)

a) China

Country	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
U.S.A	24,833	14,142	32,280	17,588	26,862							
Netherlands	8,461	2,959	11,160	15,967	34,006							
India	4,951	4,109	1,400	4,609	3,751							
South Korea	4,773	4,655	6,620	4,518	5,892							
Turkey	2,990	1,325	3,010	4,962	4,112							
Canada	4,599	2,157	7,452	4,288	3,265							
Thailand	4,395	2,679	3,368	2,067	3,620							
Vietnam	5,175	2,551	3,778	3,236	2,153							
Japan	2,902	2,365	168	1,266	2,517							
Brazil	3,115	2,729	2,070	2,091	3,033							
Others	16,530	18,988	26,749	22,627	25,038							
Month Total	82,724	58,659	98,054	83,218	114,249							

b) Japan

Month	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
China	6,491	7,515	12,944	6,847	9,569							

Version: June 20, 2022 - July 01, 2022



Malaysia	3,214	3,662	4,307	2,275	688	
Vietnam	1,825	2,314	2,602	1,812	818	
Thailand	576	515	733	757	228	
Philippines	552	573	507	369	453	
Indonesia	346	334	792	596	279	
Taiwan, China	339	637	611	1,123	250	
Turkey	332	231	401	386	476	
U.S.A	212	303	353	633	219	
Australia	161	84	25	1,111	39	
Others	365	582	1,043	1,105	2,274	
Month Total	14,413	16,748	24,317	17,013	15,293	

c) South Korea

Month	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
China	9,102	4,950	3,994	2,611	2,630							
India	5,551	4,851	4,434	4,422	6,204							
USA	2,305	2,163	2,155	2,736	857							
Turkey	2,589	1,773	1,968	1,764	914							
Vietnam	1,613	1,363	1,760	868	834							
Thailand	1,378	1,301	1,384	1,591	1,329							
Japan	913	621	973	673	654							
Malaysia	437	839	1,262	686	386							
Mexico	693	578	641	231	118							
France	685	396	1,343	883	552							
Others	8,123	8,555	10,995	7,992	8,182							
Month Total	33,390	27,390	30,910	24,458	22,660							

Table 10 Southeast Asia, India, Taiwan China Monomeric MDI Imports from China, Japan and South Korea in 2022 (Tonnes)

a) China

Country	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Taiwan, China	1,258	1,494	1,486	1,338	1,993							
India	1,265	498	1,400	1,855	1,561							
Vietnam	1,047	1,224	621	1,540	1,899							
Brazil	1,283	1,143	948	590	1,597							
U.S.A	527	537	724	647	960							
Singapore	424	345	692	750	215							
Pakistan	674	1,187	724	855	1,267							
Turkey	773	419	526	1,464	823							
Slovenia	192	216	1,056	288	576							
Netherlands	391	0	95	95	95							

Version: June 20, 2022 – July 01, 2022



b) Japan

Month	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
China	1,934	4,437	4,735	769	2,068							
Turkey	1,042	1,260	806	470	706							
Singapore	680	932	1,370	805	462							
Taiwan, China	586	842	924	1,016	668							
Vietnam	684	589	986	1,358	713							
Pakistan	168	722	336	269	185							
India	83	433	560	961	554							
Thailand	202	134	347	213	168							
U ARB E	168	168	252	252	-							
Indonesia	84	22	55	34	27							
Others	41	93	179	92	72							
Month Total	5,672	9,633	10,550	6,239	5,623							

c) South Korea

Month	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
China	2,204	4,371	3,401	417	2,204							
Turkey	2,319	645	978	1,405	879							
India	1,268	1,256	1,703	1,399	1,810							
Taiwan, China	569	340	622	523	735							
Pakistan	362	313	393	296	280							
Vietnam	414	254	324	577	317							
Brazil	361	146	421	435	373							
Japan	284	162	169	121	92							
Thailand	145	245	386	391	97							
Italy	82	197	313	461	296							
Others	719	708	519	764	413							
Month Total	8,727	8,637	9,229	6,787	7,496							

Version: June 20, 2022 - July 01, 2022



Downstream Analysis

Auto Production and Sales Volume in Southeast Asia

Although the development status of the automotive industry in Southeast Asian countries varies, the overall sales and production volumes of automobiles in these countries indicate an upward trend. Thailand is the top-ranked automobile manufacturing and exporting country in Southeast Asia, with a complete industry chain and large domestic and international markets. Local vehicle production in April, 2022 reached 117,786 units, up 12.9% YoY and sale volume increased by 9.1% YoY. The automotive industry also plays a vital role in Indonesia's national economy and is the 5th largest export earning sector after animal and vegetable oils and fats, steel, machinery, and electromechanical equipment. Indonesia increased the production volume to 100,626 units and a sale volume to 82,877 units in April. Malaysia is the third largest auto manufacturer in Southeast Asia and the third largest auto market in Southeast Asia, second in size only to Thailand and Indonesia. Malaysia made 54,734 vehicles in April.

Table 11 Auto Production and Sales Volume in Southeast Asia in 2022 (Units)

a) Production

Country	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Indonesia	119,428	114,850	136,938	100,626								
Malaysia	42,961	51,291	59,908	54,734								
Myanmar	603	431	590	457								
Philippines	5,543	5,805	6,789	5943								
Thailand	158,036	161,307	178,928	117,786								
Vietnam	18,405	13,785	33,226	20,111								
Month Total	344,976	347,469	416,399	299,657								

b) Sales

Month	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec
Indonesia	84,138	81,290	98,544	82,877								
Malaysia	41,498	45,032	73,222	56,213								
Myanmar	1,125	1,013	1,273	621								
Philippines	20,765	24,304	29,685	25,149								
Singapore	3,747	2,913	3,780	3,638								
Thailand	75,268	79,363	92,010	63,427								
Vietnam	30,742	22,802	36,962	42,359								
Month Total	257,283	256,717	335,476	274,284								

Source: ASEAN AUTOMOTIVE FEDERATION

Version: June 20, 2022 - July 01, 2022



Market Outlook

TDI

Southeast Asia & India: The TDI prices in Southeast Asia and India will continue to be weak in the next few weeks. Supply in China is stable, as Shanghai BASF and Covestro have enough stock to cope with their maintenance schedules in July. Downstream demand from Southeast Asia and India will still be stagnant. Especially in Southeast Asia, the traditional off-season is expected to last for a few weeks and thus weaken the demand.

Polymeric MDI

Southeast Asia & India PMDI: The PMDI prices in Southeast Asia and India are expected to remain stable in the following weeks. Supply will be a bit tighter, as maintenance plan from certain manufacturers will drive the overall operating rates of manufacturers in Asia down from 83% in June to 79% in July. Most of the downstream industries will be negatively affected by the continuing rainy season in July, especially for construction industry.

Monomeric MDI

Southeast Asia & India MMDI: The MMDI market prices in Southeast Asia and India are expected to show varying degree of growth in the following weeks. Maintenance plans from Chinese manufacturers in July makes them be about to reduce supply. Thus the MMDI price has increased in China, which will then transmit to southeast Asia and India market. Demand from downstream industry will be stable in Southeast Asia. In India, however, the demand from shoe sole and CASE polyols has grown a lot and will continue.

Version: June 20, 2022 - July 01, 2022



Subscription Instruction

Any clients who are interested in PU market reports, pls feel free to contact us at:

Tel: 0086-21-61250986

Fax: 0086-21-61159277

E-mail: info@pudaily.com

URL: http://www.pudaily.com

Add: Room 607, Block B, Rhine Hongjing Center, No. 1439, Wuzhong Road, Shanghai

STATEMENT