

Version: July 04, 2022 – July 15, 2022



Contents

Manufacturing Purchasing Managers' Index (PMI)	1
Spot Market Analysis	
Main Suppliers' Offer	
Raw Materials Analysis	
Import and Export Data	7
Downstream Analysis	
Market Outlook	

Version: July 04, 2022 - July 15, 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.

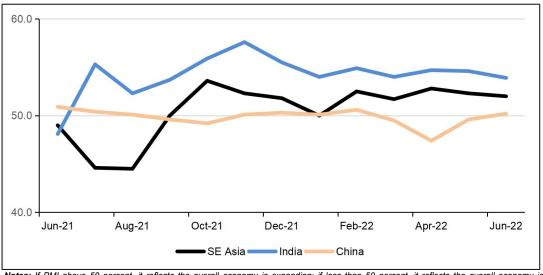
India

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.

Figure 1 Southeast Asia, India & China Manufacturing Purchasing Managers' Index (PMI) Comparison in 2021-2022 (%)



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: July 04, 2022 - July 15, 2022



Spot Market Analysis

Market Overview

(1 USD = 6.76 CNY)

TDI

Southeast Asia (SEA or SE Asia): From early July to mid-July, the TDI market in Southeast Asia remained weak and stable. The market prices stayed around USD 2,500 - 2,600/tonne CIF on July 15, which narrowed the range compared with the prices on July 01 (USD 2,450 - 2,650/tonne CIF). The traditional off-season was continuing, and demand from all downstream industry in Southeast Asia was in a weak state.

China: On July 15, China TDI market dropped down with market prices of CNY 17,000-17,400/tonne (equal to USD 2,225 - 2,279/tonne). TDI facility of BASF and Covestro in Shanghai had stopped for maintenance, which made supply of TDI tighter. But down downstream demand continued to be weak.

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	0%. Shut down for maintenance from June 25.
Shanghai BASF Polyurethane Co., Ltd.	Shanghai, China	160	0%. Shut down for maintenance for 1 month.
Wanhua Group	Yantai, Shandong	300	100%.
Wanhua Fujian (Formerly known as SEEC)	Fuzhou, Fujian	100	50%. Single line operation.
Cangzhou Dahua Group Co., Ltd.	Hebei, China	150	100%. Normal operation.
Gansu Yinguang Chemical Industry Group Co., Ltd.	Gansu, China	120	0%. Under maintenance.
Yantai Juli Isocyanate Co., Ltd.	Shandong, China	80	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%. Under maintenance.
Total capacity in Ch	ina		1,420
Avg. Operation Loads in	China		46% (in 1nd half of July)
Mitsui Chemicals & SKC Polyurethanes Inc.	Omuta, Japan	120	100%.
BASF Urethane Co., Ltd.	Yeosu, South Korea	160	50%. Temporary stop due to facility problem on July 4th
Hanwha Chemical (KPX Fine Chemical)	Yeosu, South Korea	150	33%. Single line operation.

Version: July 04, 2022 - July 15, 2022



OCI Company Ltd.	Kunsan, South Korea	50	100%.
Gujarat Narmada Valley Fertilizer Company Limited	Bharuch, India	17	100%. Normal operation.
Gujarat Narmada Valley Fertilizer Company Limited	Dahej, India	50	0%. Shut down for maintenance.
KARUN	BIK Port (BANDAR IMAM KHOMEIN)	40	0%. Device in shutdown due to carbon monoxide supply problem.
Sadara	Al Sharqiya, Saudi Arabia	200	100%.
Total Capacity in Asia and Mid		2,207	
Avg. Operation Loads in		53% (in 1nd half of July)	

Polymeric MDI (PMDI)

In Southeast Asia, the PMDI market remained weak and stable 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 15 with no change compared with the prices on July 01. Supply from Mainstream manufacturers is stable, but the market was sluggish and demand from downstream industries was quite weak, especially from home appliances and construction industry.

In China, the PMDI market went down in previous two weeks. Supply in domestic market was generally stable. Whereas the operation load of downstream industries was generally low, especially for construction industry, which was in the off-season during this period.

On July 15, for Wanhua-brand, market prices were around CNY 16,500-16,700/tonne (equal to USD 2,160-2,186/tonne FOB China excluding taxes), down by USD 217-191/tonne compared with the price on July 01 (considering exchange rate changes). For other-brands, market prices were around CNY 16,300-16,500/tonne (equal to USD 2,134-2,160/tonne FOB China excluding taxes), down by USD 177-151/tonne compared with the prices on July 01.

In India, the PMDI market remained stable and narrowed the range in the reporting period. The CIF offers for India market was around USD 2,400-2,450/tonne, changed by USD 100-0/tonne than the prices on July 01.

Monomeric MDI (MMDI)

MMDI prices in **Southeast Asia** increased slightly in previous two weeks, and mainstream price offers stayed around USD 2,750-2,850/tonne on July 15.

China MMDI market dropped down in the reporting period. The domestic market price was around CNY 21,500-22,000/tonne (equal to USD 2,815-2,880/tonne) on July 15, down by USD 196-224/tonne compared with the price on July 01 (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 15, with no change compared with the prices on July 01.

Version: July 04, 2022 - July 15, 2022



synthesis facility.

synthesis facilities.

(Ruian) only have the splitters.

1. "#" means that Shanghai Lianheng only has the

2. "*" means that BASF, Huntsman and Tosoh

3. Total capacity is calculated on the capacities of

Operation loads of plants from manufacturers are as below:

Table 2 Asia MDI Plants Operation Dynamics

Supplier	Location	Capacity (kt/a)	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.
Shanahai Lianbana laggyanata Co. Ltd #	Shanghai, China	350	90%. Normal operation.
Shanghai Lianheng Isocyanate Co., Ltd.#	Shanghai, China	240	0%. Shut down for maintenance.
Shanghai BASF Polyurethane Co., Ltd.*	Shanghai, China	210	0%. Maintenance started from early July and lasted for 3 weeks.
Huntsman (Shanghai) Polyurethane Co.,	Shanghai, China	160	0%. Maintenance started from early July.
Ltd.*	Shanghai, China	240	0%. Maintenance started from early July.
Tosoh (Ruian) Co., Ltd.*	Zhejiang, China	80	90-100%. Normal operation. Maintenance will start from August 3rd and last for 30-35 days.
Total capacity in China (Moth	ner Liquor)		3,890
Total outputs in Chi	na		147.5(in 1nd half of July)
Avg. Operation Loads in	China		83.2% (in 1nd half of July)
Tosoh Corporation	Nanyo, Japan	400	90%-100%. Normal operation.
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 July
Total capacity in Asia (Mo	ther Liquor)		5,390
Total outputs in A	sia		205.6 (in 1nd half of July)
Avg. Operation Loads	in Asia		83.9% (in 1nd half of July)

Spot Prices

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

Country	July 15	July 01	Change
Indonesia	2,500-2,600	2,450-2,650	50, -50
Malaysia	2,500-2,600	2,450-2,650	50, -50
Singapore	2,500-2,600	2,450-2,650	50, -50

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

Version: July 04, 2022 - July 15, 2022



Thailand	2,500-2,600	2,450-2,650	50, -50
India	2,700-2,800	2,550-2,650	150, 150
Chinese Mainland (CNY/tonne)	17,000-17,400	17,300-17,800	-300, -400

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

Country	July 15	July 01	Change
Thailand	2,300-2,350	2,300-2,350	0, 0
Indonesia	2,300-2,350	2,300-2,350	0, 0
Vietnam	2,300-2,350	2,300-2,350	0,0
Malaysia	2,300-2,350	2,300-2,350	0, 0
India	2,400-2,450	2,300-2,450	100, 0
Chinese Mainland (CNY/tonne)	16,300-16,500	17,500-18,000	-1200, -1500
Chinese Mainland	2,134-2,160	2,311-2,377	-177, -217

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

Region/Country	July 15	July 01	Change
Southeast Asia	2,750-2,850	2,700-2,800	50, 50
Taiwan, China	2,750-2,800	2,750-2,800	0, 0
Chinese Mainland (CNY/tonne)	21,500-22,000	22,800-23,500	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	2,500-2,550	2,500-2,600	2,500-2,530		
India	2,700-2,800	2,700-2,800	2,700-2,800		

- 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	2,400-2,450	2,400-2,450	2,400-2,450
Southeast Asia	Monomeric MDI	2,750-2,850	2,750-2,850	2,750-2,850
Taiwan, China	Monomeric MDI	2,750-2,800	2,750-2,800	2,750-2,800

Version: July 04, 2022 - July 15, 2022



Raw Materials Analysis

Toluene

Asia toluene price went down to USD 969/tonne FOB South Korea on July 15, 2022, down by USD 242/tonne compared with that on July 01, 2022.

Benzene

Asia benzene decreased to USD 1040/tonne FOB South Korea on July 15, 2022, down by USD 217/tonne compared with that on July 01, 2022.

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

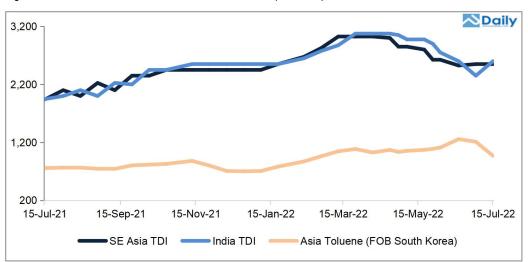
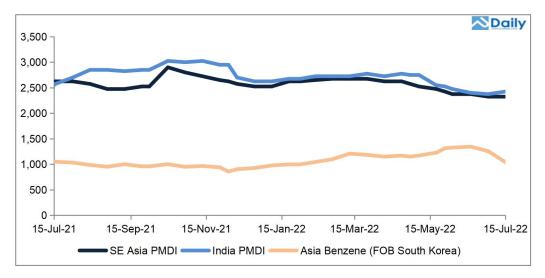


Figure 3 SE Asia and India Polymeric MDI Price Trend & Asia Benzene Trend (USD/tonne)



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;

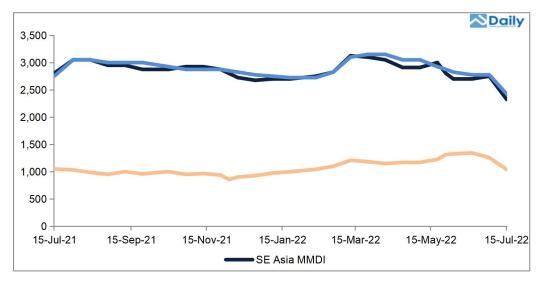
Note:

- 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: July 04, 2022 - July 15, 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;
- 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 (Tonne)

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	4 000	200	4 000	0.000	4.000							
Emirates	1,220	320	1,220	2,080	1,060							
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: July 04, 2022 - July 15, 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 (Tonne)

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: July 04, 2022 - July 15, 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 (Tonne)

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: July 04, 2022 - July 15, 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: July 04, 2022 - July 15, 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: July 04, 2022 - July 15, 2022



Market Outlook

TDI

Southeast Asia & India: The TDI prices in Southeast Asia and India are expected to remain stable in the next few weeks. Supply from TDI manufacturers in China, Japan and South Korea will be stable. Whereas the traditional off-season is continuing, downstream demand from Southeast Asia and India will still be weak, especially for upholstered furniture industry.

Polymeric MDI

Southeast Asia & India PMDI: The PMDI prices in Southeast Asia and India will remain stable in the next few weeks. Supply will be generally stable, and certain suppliers with maintenance plan in July have enough inventory to meet demand. However, the demand from downstream industries in Southeast Asia and India will continue to be weak, and the negative effect of rainy season on downstream production will last for a few months.

Monomeric MDI

Southeast Asia & India MMDI: The MMDI market prices will remain stable in Southeast Asia but be expected to go up slightly in India in the following weeks. Supply from Chinese and South Korean manufacturers will be stable. As for the demand, the overall demand from downstream industries in Southeast Asia will still be weak. In India, however, the demand of resin from footwear industry is expected to grow.

Version: July 04, 2022 - July 15, 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