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Indian Packaging Industry: Reeling under Unprecedented Raw Material Cost



lobally, with the advent of COVID pandemic, demand for manufacturing sector plummeted drastically, chemicals being no different faced the dearth in demand. Industry experts believed the recovery will be slow and sluggish, therefore many industry majors in the chemical sector went for a planned shutdown in mid-2020 while some faced force majeure. However, now when economies are recovering, market is witnessing an unprecedented increase in demand. With sudden surge in demand this has led to major imbalance in the demand supply scenario. Due to this demand and supply gap, price for raw materials cost has increased multiple folds. Besides this, the situation is being compounded by a current global shortage of containers which has led to a sharp rise

in transport costs thus further restricting supplies.

This complex mix of higher demand, capacity and supply problems together with restricted availability of transport resources is increasing uncertainty in the market and driving up feedstock prices exponentially.

Raw Material /Petrochemical Price Increase

Petrochemical raw materials and its derivatives, which include UV resins, Polyurethane resins, Solvents, acrylic resins, Adipic Acid, Glycols, Ethyl Acetate, PPG, MDI/TDI, Phthalic Anhydrid have recently experienced extreme price increase.

Epoxy resin prices have witnessed

sharp increase since the latter part of 2020. Similar to petrochemical products, prices around the globe have witnessed exponential increase for pigment raw materials, including titanium dioxide (TiO₂).

Similar challenges are affecting the market for polyester resins with factory closures in Singapore and Sweden as well an explosion at a factory in China adding to the difficulties further. This in turn has resulted in suppliers diverting product to their local markets, further pushing up prices.

The raw material scenario is reaching a peak and in fact news is getting worse by the day.

- Adipic Acid, Phthalic Anhydride and Isophthalic Acid are on a constant upswing
- All glycols have escalated, DEG, MEG
- Price of PPG has increased three folds
- Ethyl Acetate has increase by 45-50% and is culminating on a daily basis
- MDI prices has doubled along with scarcity of material

All this has severely impacted the price for printing inks, coatings and laminating adhesives used in various packaging and printing applications. At large, the price

for primary feedstock has increase as mentioned below.

PRODUCTS	Price Increase since Dec 2020
ADIPIC ACID	71%
BUTYL ACRYLATE	112%
MDI	104%
TIO ₂	28%
ETHYL ACETATE	44%
ETHYL ACRYLATE	43%
TOLUENE	52%
PPG	169%
METHOXY PROPANOL (PM)	159%
PIA	67%
PA	69%
TDI	20%
TEMPTA	58%
MIBK	84%
BUTYL CELLOSOLVE	79%

Economic Recovery in China

Strong demand from certain markets is driving up prices while an unexpectedly rapid V shaped recovery in China is also fuelling demand for these essential raw materials.

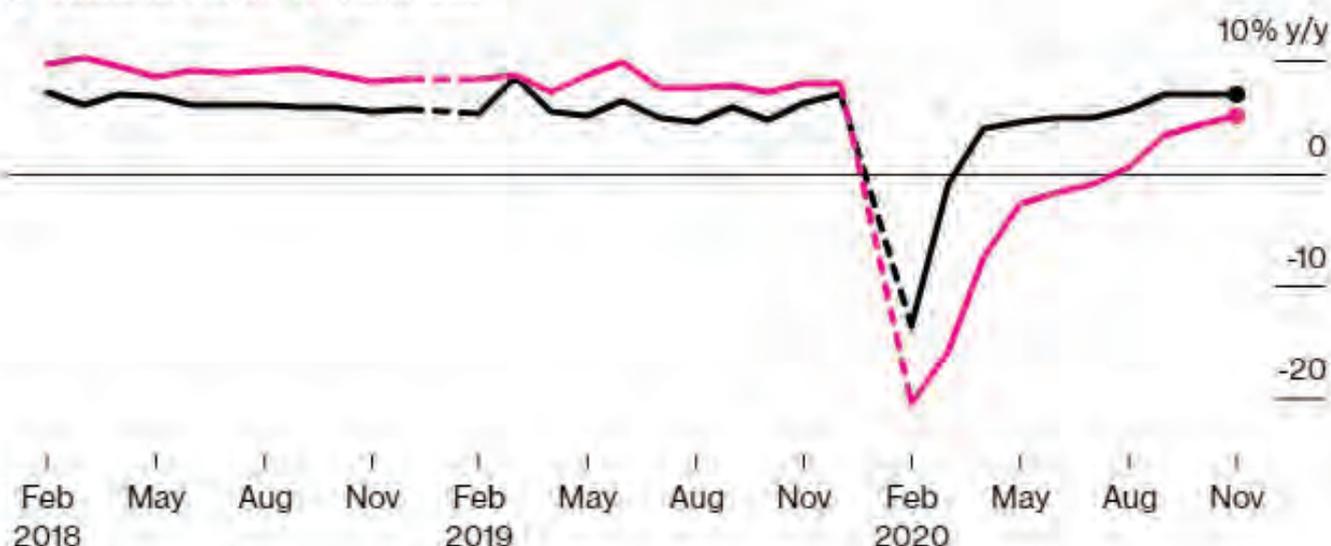
Changing Freight Rates

It's not unusual for the ocean freight rates to be changing, and it happens on a regular basis. What is not that usual, however, is the reason behind the changes this time. At India's two largest ports, JNPT and Mundra, carriers have introduced new

China's Steady Rebound

Economy continues recovery into November

Industrial output Retail sales



Source: National Bureau of Statistics
Note: NBS combines Jan.-Feb. data

general rates. We're seeing this increase because of the equipment shortages and the reduction of vessel capacity in the Indian subcontinent. This is leading to an increase in ocean freight rates that started at the beginning of Jan'21.

Looking away from India, these ports aren't the only ones, where the ocean freight rates have gone up. Containers from Jebel Ali, the United Arab Emirates, and the ports of Qingdao, Shanghai, and Nansha, China, with a destination to different parts of the world have also seen an increase in freight.

With the Covid-19 pandemic, the market in container shipping has been turned on its head.

Force Majeure Notices Are Stacking Up

Companies have clearly been cutting capital budgets, in response to the slowing global economy. That's the only conclusion to be drawn from last 4 month review of force majeure. Force majeure have been climbing steadily for months. Thus it is worth keeping a careful eye on force majeure, as they provide early indication of problems ahead.

To worsen the scenario further, in late February US Gulf coast had been hit by rare severe winter storm and ultralow temperature impacting the production and operation of MDI and TDI plants located in Texas, Louisiana, Mississippi, Alabama

and Florida. Covestro announced that the supply of MDI, TDI units in North America encountered force majeure, production of all units in Texas including 330,000 tons of MDI and 220,000 tons of TDI will be impacted.

Another key raw material Acrylic acid is in shortage globally due to on-going shutdown of LG-Korea (no update on production till March), force majeure of Sasol-South Africa & fire accident of China's Zhejiang Satellite Petrochemical. LyondellBasell, INEOS declare force majeure. IQ declares force majeure on butanols, butyl acetate

freights are more than 4 times as compared to Jan.

- These unprecedented dynamics have resulted in significant inflationary pressure which requires to raise prices to offset these costs
- Some of the raw material suppliers are now resorting to monthly price. Inks, Adhesives and Coatings also plan to implement the same, instead of quarterly pricing
- At this stage, this extreme situation looks set to continue till June / July 2021 at the earliest. Although it could be extended. ■

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Conclusion

Key drivers for the increases include high demand across all industries, greater domestic supply requirements and broad demand pressures and higher costs. While the actual costs vary widely from region to region, higher than average per ton costs have been aggravated by significantly higher freight costs.

Consequences due to feedstock and freight cost increase

- Inordinate delay in the shipment execution from different overseas suppliers due to vessel space/ container shortage. Current ocean



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