



PLEXCONCIL - The Plastics Export Promotion Council

PLEXCONNECT[®]

Edition 34, April 2022



**What are FCM Regulations?
Sunanda Kadam, Intertek explains**

**Product of the Month –
Slide Fasteners & Zippers of Plastic**

**Interview with Uday Adhikari
on Innovating for Success**

Focus on Mexico



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It is said that all dreams can come true if one has the courage to pursue them. To this I would say that in addition to courage, add a firm vision, a plan and determination to stay on course and success is well within reach. For the first time, India achieved \$400 Billion in exports, well ahead of its target date. This fantastic achievement comes as a result of the visionary leadership of our country and the bold, strategic measures and policies that make up the dynamic mechanism set out to achieving the goals. We believe that this feat only marks the beginning of the greater glories that lie ahead for our country.

On the same note, I am even prouder to share that plastics exports for the current fiscal year is all set to surpass \$13 Billion. This would be the highest in exports that we have achieved so far and well over the target set for this year.

During February 2022, India exported plastics worth USD 1,053 million, up 21.2% from USD 869 million in February 2021. Cumulative value of plastics export during April 2021 – February 2021 was USD 12,161 million as against USD 8,856 million during the same period last year, registering a positive growth of 37.3%.

The Council recently returned from a very successful visit to the USA and Mexico. During the visit to the Plastimagen show, Plexconcil signed an MOU with ANIPAC – the largest plastics association in Mexico and the India-Mexico Business Chamber (IMBC). The tri-party agreement aims to bolster plastics trade between the two countries as well as extend our industry's outreach into Mexico. The Council also recently concluded its BSM with Colombia, an event that was jointly organized by the Council along with the Indian Embassy in Bogota, Colombia. Latin America is of great strategic importance with abundant export opportunities. The Council, through its various efforts aims to help our industry reach out to newer markets as well as capture newer opportunities in developed markets. The latest pandemic developments in China have once again shifted focus towards India and we must aggressively pursue the opportunities & goals by showcasing our best through participation at international exhibitions, BSMs, greater number international tie ups and more.

Packaging is one of the largest applications of plastics, especially where food, medical and pharmaceuticals, etc is concerned. In this issue, we talked to Ms. Sunanda Kadam of Intertek about Food Contact Materials and the regulations that are applicable globally. This is especially important as rules & regulations globally get more stringent and there is greater demand to ensure food safety. We have also interviewed Mr. Uday Adhikari, AL Aziz Pipes, for having won the India SME Excellence Award for Innovation. As he has rightly said in his interview, there is very little room at the top and for one to get there, the only way is through innovation. Today, our industry is well respected for the quality and our engineering prowess. We need to thus capitalize on all our strengths if we are to be among the global leaders. In this issue, we also look at Mexico as our focus export destination and have covered Slide Fasteners & Zippers of Plastics under our Product of the Month. All this in addition to more updates and news from India and around the world.

On a last note, I would also like to welcome aboard our new Editorial Advisor, Mr. Niranjana Mudholkar who brings with him a wealth of experience in media and publishing. Having been previously associated with esteemed publications such as ET Polymers, etc we look forward to support to further elevate the stature of our magazine.

I would like to sign-off by congratulating and thanking all our industry members who have been integral to our own success story. Here's looking forward to greater achievements ahead!

Warm Regards,

Arvind Goenka
Chairman

District Export Promotion Committee Meeting for Panchmahal District | 02.02.2022 | Western Region

District Export Promotion Committee Meeting for Panchmahal District was held virtually on 2nd Feb, 2022. All the stakeholders deliberated on preparation of District action plan to boost Plastic Export from Panchmahal District. The Plexconcil was represented by Mr Naman Marjadi, Assistant Director, Regional Office-Ahmedabad. Several suggestions were given during the meeting for boosting of Plastic exports from the District by Plexconcil and other stakeholders.

District Export Promotion Committee Meeting for Dahod District | 02.02.2022 | Western Region

DEPC Meeting for the Dahod district was held virtually on 2nd February, 2022. Discussion was held on Gujarat State Export Analysis, Dahod District Profile and Recommendations and Action Plan for boosting exports from the District. The Plexconcil was represented by Mr Naman Marjadi, Assistant Director, Regional Office-Ahmedabad.

Consumer & Houseware Panel Committee meeting on 3rd February, 2022 | Western Region

Council organised Consumer & Houseware Panel Committee meeting on 3rd February, 2022 through virtual mode under the Panel Chairmanship of Mr. Dhruv Sayani. Export statistics for the Consumer and Houseware products and scope for growth was discussed during the meeting. Members also discussed the issues faced by them while doing exports. It was decided to make a representation of all the issues to the Ministry through Council.

WEBINAR on Budget 2022 – Analysis of Tax Implications | 04.02.2022 | Eastern Region

The Plastic Export Promotion Council (PLEXCONCIL) jointly with SHEFEXIL & Lakshmikumaran & Sridharan (L&S) organized a Webinar on 'Budget 2022 - Analysis of Tax Implications'. The webinar analysed the tax proposals and their possible impact on various stakeholders like manufacturers, service providers, traders, exporters, importers, etc.

PTFC Meeting (Virtual) organised by Chennai Exports Commissionerate on 08.02.2022 | Southern Region

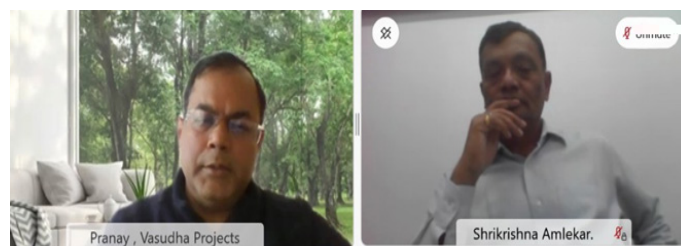
The monthly PTFC Meeting (Virtual) organised by Chennai Exports Commissionerate was held on 08th February 2022 to address the grievances with regard to Exim logistics at the Chennai Port. The Council was represented by Mr. Ruban Hobday, Regional Director – South.

Human Hair Panel Members Meeting with Commissioner of Customs, Chennai on 08.02.2022 | Southern Region

Meeting with Principle Commission of Customs, Chennai (Air) on 8th Feb 2021 with regard to Human Hair exports and discussion the latest notification on HS 0502 being the restricted item. The RD along with Mr. Satish Gandhi, Mr. Somasundaram and Ms. Renuka from the Human Hair industry met the Mr. Uday Bhaskar IRS to explain about the raw human hair which is been notified under the restriction item but that all the other value added, processed, finished human hair products should be allowed to export. The Commissioner requested the Plexconcil to submit with photos of the process from raw to value addition with clear explanation which will be passed on to the AO's for their understanding of the products so that they will not stop the value-added products for exports. It can be a soft copy. The Human Hair association to revert with full details about the process so that Plexconcil can submit the same to the Council.

PLEXCONNECT- Webinar on Understanding of Plastic Waste Management Rules (PWM) & Extended Producer Responsibility (EPR) | 16.02.2022 | Western Region

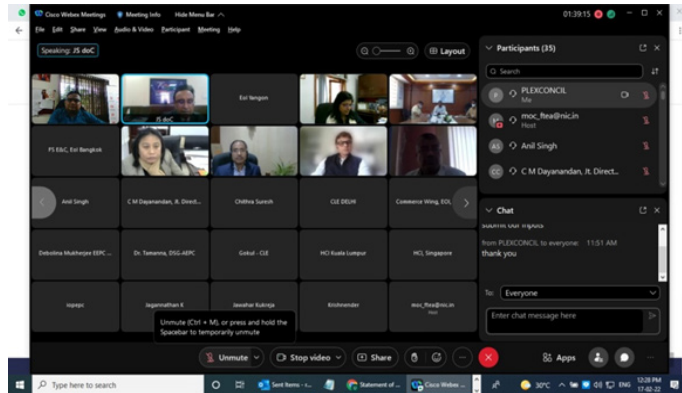
The Plastic Export Promotion Council (PLEXCONCIL) organized a Webinar on Understanding of Plastic Waste Management Rules (PWM) & Draft Extended Producer Responsibility (EPR) on 16th February, 2022 (Wednesday) from 11.00am to 12.30pm.



(L to R: Mr Pranay Kumar– Vasudha Ecofriends Projects P Ltd and Mr Shrikrishna Amlekar, Panel Chairman, Polyester Films, Plexconcil)

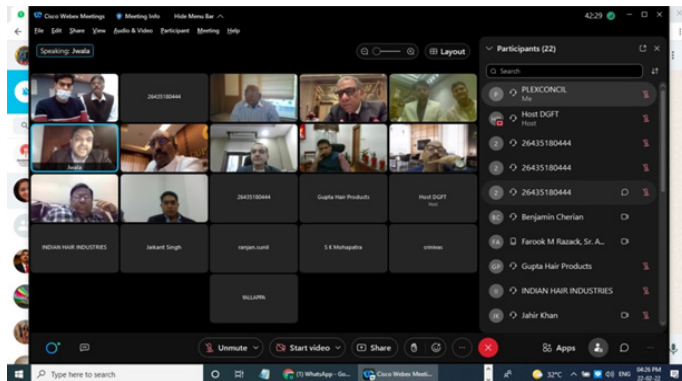
Ms Bharti Parave, Assistant Director, Plexconcil gave opening remarks of the webinar. Mr Shrikrishna Amlekar, Panel Chairman, Polyester Films, Plexconcil and Director- IPD Operations, Garware Hi-Tech Films Ltd gave the welcome address for the webinar. Mr Pranay Kumar– Vasudha Ecofriends Projects P Ltd gave detailed presentation on Plastic Waste Management Rules, Single use plastics Regulations, Draft Extended Producer Responsibility (EPR). Presentation was followed by Q & A session which was moderated by Ms Bharti Parave, Asst. Director (Trade & Policy), Plexconcil. The webinar ended with Vote of Thanks by Naman Marjadi, Asst. Director, Plexconcil Ahmedabad.

Export Target for ASEAN Countries discussion (Virtual) with MoC, DGFT & Embassies on 17.02.2022 | Southern Region



Plexconcil was invited to the meeting on Export Target to ASEAN Countries discussion (Virtual) with DGFT, MoC & Embassies on 17th February 2022 along with other stakeholders and the Council was represented by Mr. Ruban Hobday, Regional Director – South.

Meeting (Virtual) with DG, DGFT along with Human Hair Exporters | 22.02.2022 | Southern Region



A VC meeting was held on 22.02.2022 under the Chairmanship of Shri Santosh Kumar Sarangi, DG, DGFT to discuss the issues related to export of Human Hair from India. Plexconcil attended the meeting and gave relevant details and inputs with regard to the Export of Human Hair.

Virtual Meeting / BSM with Ghana | 23.02.2022 | Eastern Region

PLEXCONCIL jointly with High Commission of India, Ghana successfully organised India-Ghana Virtual Meeting/BSM on 23rd February 2022. High Commissioner of India to Ghana spoke during the inaugural session. 14 Indian companies participated at this event.



PLEXCONNECT- Webinar on Boost your competitiveness through MSME Schemes | 25.02.2022 | Western Region

The Plastics Export Promotion Council organised a Webinar on Boost your competitiveness through MSME Schemes on 25th February, 2022 from 3.30pm to 5.00pm. Welcome Address for the webinar was given by Mr Alpesh Patel, Chairman- Gujarat Region Committee, Plexconcil and Managing Director, Knack Packaging Pvt Ltd.



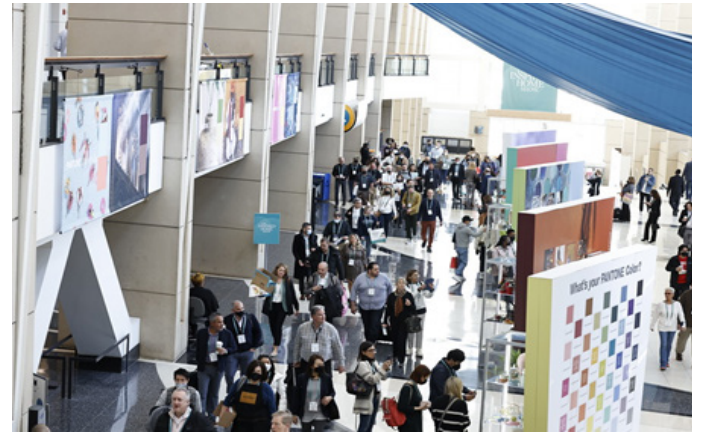


POST EVENT COVERAGE

THE INSPIRED HOME SHOW | Chicago | USA
MARCH 5-7, 2022 | MCCORMICK PLACE, CHICAGO, IL

The PLEXCONCIL in its endeavour to promote the export of plastics products, participated in The Inspired Home Show, Chicago, USA for the first time with 10 exhibitors from the sector.

About the Show:



(L to R: Mr Alpesh Patel, Chairman- Gujarat Region Committee, Plexconcil, Shri P. N. Solanki, IEDS, Dy. Director, MSME DI, Ahmedabad, Shri Ashis Kumar Padhi, IEDS, Assistant Director, MSME DI, Ahmedabad)

Shri P. N. Solanki, IEDS, Dy. Director, MSME Development Institute, Ahmedabad gave brief about activities of MSME DI and invited participants to visit and take advantage of newly built MSME Bhavan of MSME DI Ahmedabad. Shri Ashis Kumar Padhi, IEDS, Assistant Director, MSME Development Institute, Ahmedabad gave presentation on various Incentive schemes of Development Commissioner (MSME), Ministry of MSME, Government of India to boost competitiveness of industry participants. He also guided and resolved various queries of participants during Q & A session. Q & A session was moderated by Mr. Naman Marjadi, Asst. Director, Plexconcil Ahmedabad. The webinar ended with Vote of Thanks by Ms Bharti Parave, Asst. Director (Trade & Policy), Plexconcil

Formerly known as the International Home + Housewares Show, The Inspired Home Show is North America's largest housewares trade show! It connects not the only buyer to seller, but also product to lifestyle and the industry to the consumer mindset. Every year, more than 52,000 home and housewares professionals from more than 130 countries converge upon Chicago to discover new housewares products and industry trends, meet face-to-face with executives from top retail and manufacturer brands, and gain insights, leads, and exposure to jump-start a successful year. The Show is owned and operated by the International Housewares Association (IHA), which has a rich history within the housewares industry dating back more than 80 years.



TIHS 2022 witnessed many educational seminars and networking opportunities.



PLEXCONCIL'S Meeting During the Show

Organizers – Inspired Show

Shri. Sribash Dasmohapatra, Executive Director, Plexconcil along with Shri. Ruban Hobday, Regional Director – South, Plexconcil discussed with Mr. Derick Miller, Director, Ms. Nancy Michael Director, Trade Show Business Development & Ms. Michele Orto (Layman) Manager, Trade Show Sales.



Indian Pavilion:

The Indian pavilion had 11 Exhibitors displaying various houseware products. The exhibition provided a great platform for the first-time exhibitors to create awareness about the Indian Products at this important houseware show in the USA market. The Indian Pavilion has made a footprint at the show even though this was the first time the Plexconcil had organized the Pavilion.

The following points were discussed and submitted for follow up from both ends:

1. The location to be reviewed for the next year 2023.
2. IHS to send information on the products are being sourced by buyers at the 2023 show so that the Indian exhibitors may plan their participation accordingly.
3. All the information concerning the market analysis, buyer's preference, and statistics would be shared by the IHS team with Plexconcil.
4. IHS assured support for proposed PLEXCONCIL'S PLEXCONNECT 2023 exhibition in India.



Consulate General, the Consulate General of India, Chicago, USA

The inputs received from the Indian Companies were encouraging. Despite low expectations, the exhibition saw sizeable buyers visiting the show including the Indian Pavilion. This being the first physical show after the pandemic the response was more than satisfactory. Many inquiries were received by the Indian Companies.



The show will next be held from March 4-6, 2023 at the same venue.

Shri. Amit Kumar, Consulate General, the Consulate General of India, Chicago, USA inaugurated the Indian Pavilion during a brief function at the India Pavilion. He was impressed with the Indian Companies who participated despite the uncertainty surrounding the show due to the pandemic situation. He met exhibitors and observed their inputs and their need to promote and have a better show next year. He was accompanied by Mr. Laxman Prasad Gupta, Consul (Eco & Commerce), Consulate General of India, Chicago.



Exhibitor's List:



During the brief meeting with Executive Director Shri. Sribash Dasmohapatra and Shri. Ruban Hobday, Regional Director, Plexconcil the Consul General appreciated the efforts of the Council and assured all help to promote the show and the sector in the USA.

Executive Director's Meeting with the Consul General at the Consulate General of India, Chicago

Executive Director Shri. Sribash Dasmohapatra was invited by the Consul General, Consulate General of India, Chicago, the USA to his office to further firm up the discussion on the support towards the Council's proposal to host the Business Delegation and BSM during Aug/Sep 2023 in the USA. During the discussion, it was suggested that Chicago can be one of the locations for the BSM. The Consul General assured all support to make the delegation visit in September 2022 a grand success to improve the exports into the USA.

1. General Traders
2. Plastona
3. Sunshine Products
4. Siddh International / Tokyo Plast International
5. Hamilton Housewares
6. Kuloday Technopack Pvt Ltd Common Area
7. Raut Engineering Pvt Ltd Common Area
8. RK Poly Products Common Area (Only Display)
9. Chemco Group Common Area (Only Display)
10. Dynasty Plastics Common Area (Only Display)

INDIAN PAVILION BOOTH



Council Activities - February 2022



PLASTIMAGEN 2022, MEXICO

MARCH 8-11, 2022 | CENTRO CITIBANAMEX, MEXICO

The PLEXCONCIL in its endeavor to promote the export of plastics products took part in PLASTIMAGEN 2022, MEXICO with 5 exhibitors. This was the 4th time that the Plexconcil was participating in this most important show covering entire Latin America for the Plastics Industry.



About the Show:

PLASTIMAGEN® MÉXICO 2022, the first international face-to-face event of the industry after COVID in Latin America, was organized with over 400 exhibitors representing more than 1,000 brands from more than 20 countries, 13 International Pavilions, including ANIPAC Pavilion (the National Association of Plastic Industries in Mexico).



With more than 34,000 m2 of exhibition space, PLASTIMAGEN® MÉXICO as the most comprehensive plastics expo in Latin America had 22,000 visitors seeking innovative solutions for their companies.

PLASTIMAGEN® MÉXICO is the industry's premier expo in the region, where the world's leading suppliers gather in a single forum to provide key decision-makers with state-of-the-art solutions for:

- Machinery and equipment
- Raw Materials
- Transformation of plastics and plastic products
- Services for the plastics industry



Other International Pavilions at the show were CHAN CHAO, USA PAVILION, GERMANY, ITALY, TURKISH, FRANCE, CANADIAN, PORTUGAL, SWISS, AUSTRIA, BRAZIL along with Indian Pavilion.

Indian Pavilion:

The Indian pavilion had 5 Exhibitors displaying various products including packaging, machinery, and other related products. The exhibition provided a great platform for the first-time exhibitors at the show to create awareness about the Indian Products at this show which is considered as the hub for Latin American plastic industry sourcing.



The inputs received from the Indian Companies were encouraging. Being the first physical show after the pandemic in this part of the world, the response was more than satisfactory. Many inquiries were received by the Indian Companies.

The show will be held from November 7th-10th, 2023 at the same venue next year.

India's Export Potential in the MEXICO Market

The export potential of plastic products from India to Mexico is valued at USD 7.26 Billion

| | |
|---|--------------|
| Plastic Raw materials | \$2,256.44MN |
| Plastic Films & Sheets | \$1,299.75MN |
| Consumer & Houseware | \$777.51MN |
| Medical items of plastics | \$766.02MN |
| Miscellaneous Products & Items nes | \$593.76MN |
| FIBC, Woven Sacks, Woven Fabrics, Tarpaulin | \$317.29MN |
| Packaging Items – Flexible Rigid | \$460.01MN |
| Floorcoverings, Leather Cloth & Laminagtes | \$488.04MN |
| Cordage, Fishnets & Monofilaments | \$56.72MN |
| FRP & Composites | \$1.48MN |

PLEXCONCIL'S Meeting During the Show

Messe Dusseldorf (K Show 2022)

Executive Director Mr. Sribash Dasmohapatra and Regional Director Mr. Ruban Hobday, Plexconcil had a discussion with Mr. Erhad Wienkamp, Managing Director, Messe Dusseldorf, and Ms. Eve Rowe – Vice President, Messe Dusseldorf North America regarding their support for the PLEXCONCIL'S PLEXCONNECT 2023 to be held during September 2023 in Mumbai.



PLASTICS INDUSTRY ASSOCIATION, USA

Executive Director Mr. Sribash Dasmohapatra, Regional Director Mr. Ruban Hobday, Plexconcil and Mr. A. Tony (Radoszewski) President & CEO, Plastics Industry Association (PLASTICS), USA discussed the latter's support for PLEXCONNECT 2023, the exclusive exhibition to be organized by PLEXCONCIL in September 2023. Executive Director also requested assistance with the proposed Business Delegation Visit to the USA by Plexconcil during September 2023

Meeting with Mr. Paul St. Amour, Latin American Vice President - Tarsus Mexico

Executive Director Mr. Sribash Dasmohapatra and Regional Director Mr. Ruban Hobday, Plexconcil met Mr. Paul, Vice President – Tarsus Mexico & organizers of the Plastimagen 2022, Mexico.

While congratulating the organizers for the success after two years, the Executive Director confirmed that Plexconcil would be participating in the 2023 edition to be held from November 7-10, 2023. Even though the number of exhibitors was less due to the uncertainty around the date and



the pandemic situation, he assured them that Indian Pavilion in 2023 would be hopefully bigger.

Mr. Paul who was requested to support the proposed BSM in Mexico during September 2022, who informed that in principle their company would market and promote only their events. However, he expressed willingness to help the Plexconcil with necessary information and dates for the BSM.

PLEXONCIL's MoU with ANIPAC (National Association of the Plastics Industry – Mexico) & IMBC (India-Mexico Business Chamber AC)

PLEXONCIL signed an MoU with ANIPAC and IMBC in a historic event considering the importance of Mexico which is the major hub for the Latin American market for Plastic exports from India. This was possible mainly due to the continuous follow-up and the good relationship with the India-Mexico Business Chamber in the recent past. The IMBC has been instrumental in furthering this effort in signing this MoU with ANIPAC which is the sole National Association of the Plastic Industry in Mexico. The agreement is expected to go a long way for the members of the Council to increase and establish their footprint in this market in the future.



The highlights of the MoU are:

1. Jointly make significant contributions to the trade activities by coordinating & collaborating on the Promotion of Trade & Investment.
2. Cooperate and support each other in their initiatives aimed at achieving the objectives and enriching business relations between India and Mexico through ANIPAC and IMBC in collaboration with Plexconcil.
3. Cooperate and work with each other delivering relevant trade information to each other from time to time as desired by either party.
4. Render support to each other in the planning of events taking place in respective sectors aimed at expansion of business.
5. Meet (physical/virtual) on regular basis, preferably once in a year, or when necessary, as per the mutual convenience to follow up decisions taken or to foster cooperation rendering better services to their respective members.



The MoU was jointly signed by Mr. Aldimir Torres Areans – President, ANIPAC, Mr. Amit Biglani – Secretary, IMBC, Mr. Gurulinga Konanur – Vice President, IMBC and Mr. Sribash Dasmohapatra, Executive Director, Plexconcil (The Plastics Export Promotion Council) at the PLASTIMAGEN 2022, Mexico show. The others who were present during this event were Ms. Amparo – General Administrator, IMBC, Mr. Raul Mendoza – Director ANIPAC, and Mr. Ruban Hobday, Regional Director, Plexconcil.

**The Embassy of India, Mexico
Indian Ambassador's Visit to the Indian Pavilion**



His Excellency Indian Ambassador Pankaj Sharma, PhD visited the Indian Pavilion during the show along with Ms. Vallari Gaikwad – Second Secretary (Press & Information and Economic & Commercial) and Ms. Ankita Wakekar – Third Secretary (Political) and were very impressed with the presence of Indian Exhibitors at the show. He interacted with each exhibitor in understanding their products and the support they needed from the Embassy of India in the future.

Executive Director Mr. Sribash Dasmohapatra, Plexconcil, and Mr. Ruban Hobday, Regional Director, Plexconcil had a detailed discussion with the Ambassador in highlighting the importance of the exhibition and to have a larger presence during the next year's show. The following points were put forward for the Embassy's support for the activities proposed by Plexconcil

1. To guide and support the proposed Business Delegation visit to USA and Mexico in September 2022 including identifying the buyers to host the BSM (1 or 2 days) in Mexico.
2. To support with logistics for the BSM
3. To send the importer's list of Plastics industry in Mexico
4. To send statistics and any other information pertinent to the Plastic Industry.



The Ambassador assured all his support of the proposals submitted by the Council and he was glad that Mexico was included along with the USA and his team would help and guide for a successful BSM in September 2022. He was glad to note about the MoU with IBMC and ANIPAC coming through which he felt was a breakthrough achieved by the Council to enlarge and establish the Indian presence of Plastic in Latin America.

Later he invited all the Indian Companies for a dinner which was hosted by Mr. Sushil Kumar, First Secretary (Senior PPS to Ambassador), Embassy of India.

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MATERIALS



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capable of testing as per International protocols



KONKAN SPECIALITY POLYPRODUCTS PVT. LTD.



Uday Adhikari,

Managing Director, Al Aziz Plastics Pvt Ltd on Winning the “SME of the Year Award” at India SME Excellence Awards

Embracing Innovation for Success

The SME Chamber of India recently presented its 21st Edition of “INDIA SME EXCELLENCE AWARDS” to Al-Aziz Plastics Pvt. Ltd. as a SME of the Year Award in Innovation & Inventions. The Award received by Mr. Uday Kashinath Adhikari – Managing Director, Al-Aziz Plastics Pvt. Ltd., and was presented by Hon’ble Governor of Maharashtra, Shri Bhagat Singh Koshyari on 13th February 2022 at the Raj Bhavan, Mumbai. The event was organized jointly by ‘SME Chamber of India Maharashtra Industrial’ and ‘Empowering SMEs for Global Competitiveness Economic Development Association’.

Founded on the core vision of fiercely embracing limitless innovation since its inception in 1988, Al Aziz today has revolutionized the hardware industry for the secure channelization of electricity, water, and gas. The Company has created a respectable intellectual property portfolio with patents, design registrations and has also applied for patents in multiple countries world over. Their latest, one of kind innovation, the **Multiport Clamp Saddle and the Integrated Clamp Saddle** have been developed and designed to revolutionize the entire concept of water distribution globally.

Plexconnect in conversation with Mr. Uday Adhikari on the most recent innovations that won the company the India SME Excellence Award.

What was the inspiration behind your company’s latest innovation? What prompted the idea?

Inspiration, in my opinion, is not necessarily born from any particular incidence or instance. One can be always inspired. In the walk of life, and when in business, I am always seeking to find what else or what new can be done. It may arise from the need to better the product or evaluate how it can add further value to not only just one’s own business, but the society at large, or Govt and the industry as a whole. I believe inspiration is simply driven by the need to grow, do more and better for all the stakeholders as well as improve the quality of life in general.

How do you feel about receiving such a prestigious award? What would you like to say to your industry peers?

To say the least, I am truly humbled. Our company has in the past received several awards, including a President’s Award and while it is always an honour, this particular award holds very dear as it was received from our Hon’ble State Governor. Such awards also give one the drive to look forward to doing & achieving more and hence, while it is always a proud privilege to receive recognition for one’s work, we must go on.



To my industry peers, I would like to especially mention that if you have to grow, you have to innovate. Copying does not get you too far and if you stop innovating, you stop adding value to your own business and hence will lose out to competition eventually. Like a pyramid, there is very little place at the top and only those who remain ahead of their game, are the ones who get there. Today, cost is the biggest constraint and determining factor in any business. Be it in manufacturing or materials, etc, every business needs to think about looking for a competitive advantage and innovation can be your biggest game changer.

Are there similar products available in the market today? What makes your product stand apart?

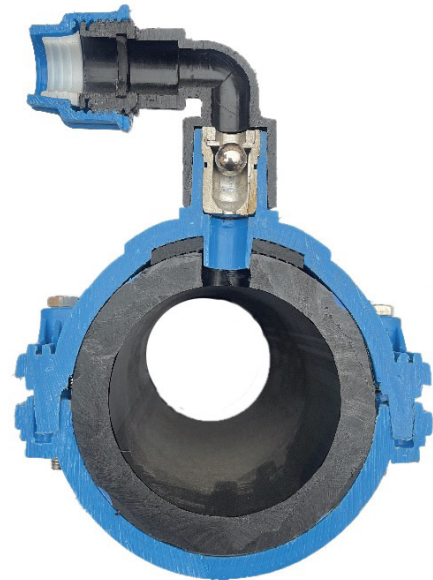
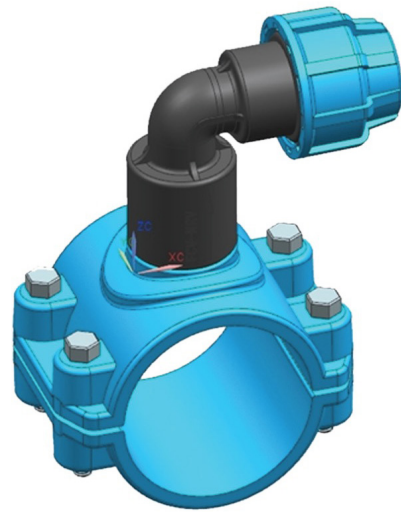
I am very pleased to tell you that the products that we have recently developed are completely new and are not available anywhere in the world. We have an Indian patent and have applied for a global patent as well. These kinds of products did not exist earlier.

Both, the Multiport Clamp Saddle and the Integrated Clamp Saddle have been developed to acknowledge the demanding requirements in public utility and water distribution. The products have been designed to revolutionize the entire concept of water distribution globally.

What are the advantages of the product over existing solutions that are commonly used in the application? Please elaborate on the key results of using your product.

Integrated Clamp Saddle – Presently, three separate components such as an Individual Saddle, Flow Control valve/ Brass Ferrule & a Compression FTO/FTA is used which is not only time consuming, especially in execution & completion of large projects, but also that the with multiple joints, the

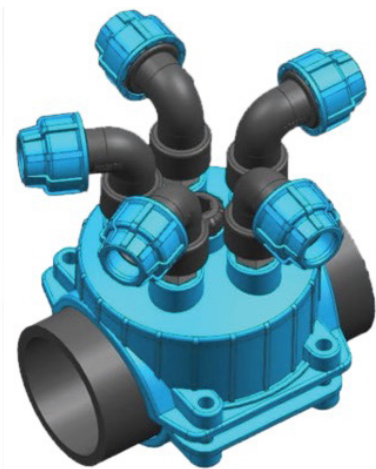
risk of leakages is much higher. We have also often seen theft of the valves, tampering and of course, higher expense of having to use three components. Our product comes with a built-in Flow Control



valve which are factory fitted with the Compression valves. Our products are corrosion free as they are made from MOC PE/PP & Stainless steel – 304. They are designed to withstand vehicular & axial loads, earth movements & vibrations, feature NRV function and are food grade. These comprise three components all built in one – including PP Clamp Saddle, Flow Control Valve & Compression elbow.

The product assures equal distribution of water, it is homogenous, and we ensure end to end quality. It is also cost effective compared to existing solutions as it replaces 3 components, requires shorter installation time, ensures zero leakage, is maintenance free and very importantly, prevents water theft, hence wastage.

Multiport Clamp Saddle – Currently, each household is connected by an individual saddle and a separate trench or pit is required for each household making installation a time-consuming affair. Existing solutions reduce the strength of the main pipe as they result in greater number of holes on the main pipes. Current solutions are also more expensive and result in longer completion time, especially in large projects.



One Multiport Clamp Saddle can be used for multiple households and options available include 2,3,4, 5 & 8 way outlets. These are compatible with conventional brass ferrules, Flow control valve, compression fittings, UPVC fittings & GI fittings, etc. However, these can be supplied with an in-built Flow Control valve as well to ensure equal distribution and non-return. These are also designed to withstand vehicular/ axial loads, earth movements & vibrations.

The product requires just one piercing in the main pipe, one pit for connecting to multiple households, is quick to install and is cost compatible.

How will the current innovation impact your export opportunities?

Besides our latest products and our overall product basket, we are also looking at wider applications for plastics as well as exports from India. If our exports, current and future, have to grow, we must pursue constant product innovation so that they find acceptance in a way that it meets varying needs and adheres to various global standards. For example, specifications in Europe can be very different from that in USA or Asia, etc. Hence, we need to truly also evaluate how the diverse needs of different geographies can be met. Of course, this comes at a cost to manufacturers which makes it important for us to invest in time, effort and very importantly, innovation in process and product. The opportunities are plenty. What is required for us is to align ourselves to meet global demands.

Price Vs. Quality. Which strategy should be the focus to grow our exports? And why?

To state a case in point about price, for example, when we speak of China, presently, their main ammunition is their scale of production, which is humongous. I believe that as an industry, we perhaps are unable to fully fathom how China remains most competitive in pricing terms, compared to any other country. I believe that their huge scale of production is a definite advantage in addition to much difference in the input costs, Govt benefits, logistics, etc. However, despite the disparity in costs, there definitely are some product segments where we are able to compete or do better.

But let me tell you that today when companies in Europe or US approach us with a question or proposition, our ability to comprehend their requirements and respond with suitable solutions has earned us much more acceptance and recognition. There has been a big change in global perception towards Indian business today, and these countries have much greater trust in our service, commitment, quality and price. Though what really matters most is that the trustworthiness of Indian manufacturers is definitely increasing.

Also, the current political volatility in Europe on account of the Ukraine crisis compounded by the constantly evolving Covid situation in China and other parts of the world has resulted in European and American businesses looking at alternate supply chains to China. And there cannot be a better alternative than India.

To conclude, while China may be mostly very competitive in pricing terms, Indian exporters have enough opportunities to explore and capture.

What would you like to say to new businesses/entrepreneurs engaged in the creation of innovative products and solutions?

We need to be the leaders of change. There may be many hurdles along our way in terms of bureaucracy, acceptance, competition, etc. However, the only way to face such challenges is to get through. Many times we have faced a general reticence on the part of decision makers at Govt level, especially when it comes to large or special projects and this is perhaps purely due to lack of awareness of how innovative products can change the entire application landscape. Hence, we need to make the effort to build awareness and create value for our products.



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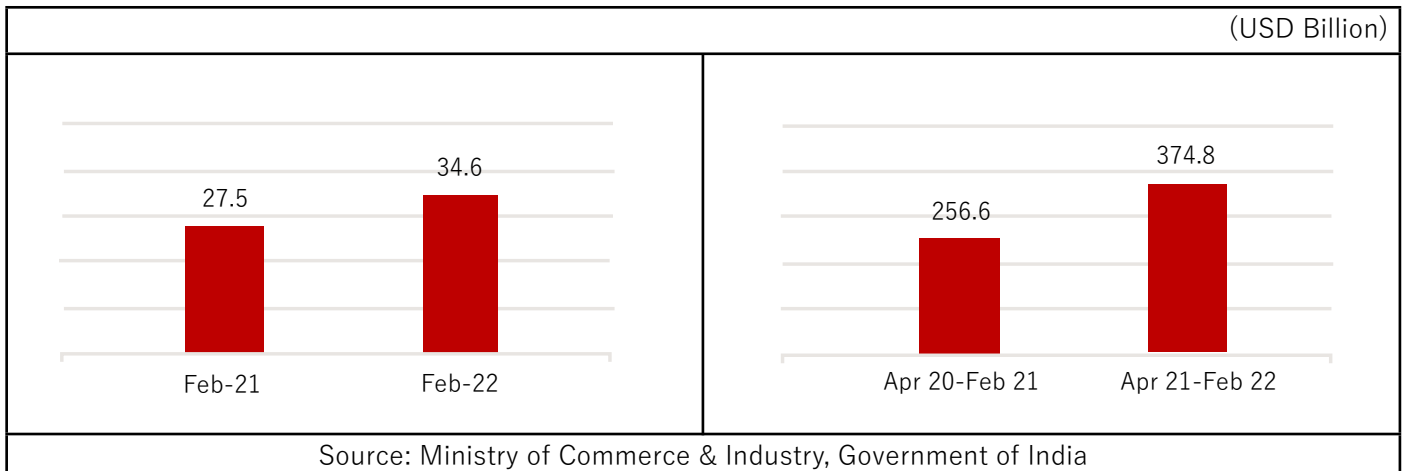


Export Performance – February 2022

TREND IN OVERALL EXPORTS

India reported merchandise exports of USD 34.6 billion in February 2022, up 25.1% from USD 27.6 billion in February 2021. Cumulative value of merchandise exports during April 2021 – February 2022 was USD 374.8 billion as against USD 256.6 billion during the same period last year, reflecting a growth of 46.1%.

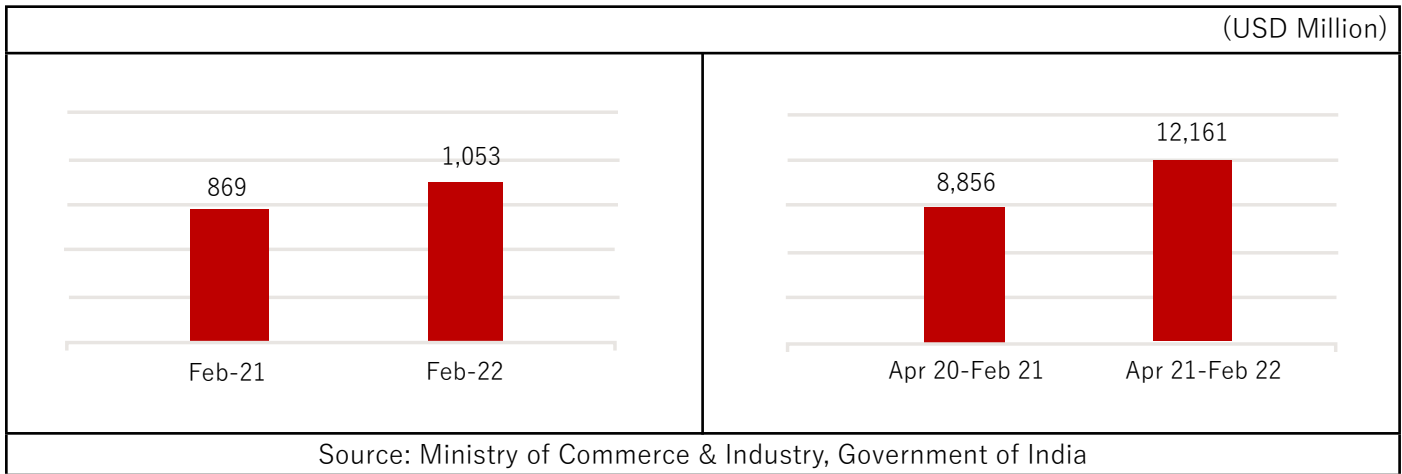
Exhibit 1: Trend in overall merchandise exports from India



TREND IN PLASTICS EXPORT

During February 2022, India exported plastics worth USD 1,053 million, up 21.2% from USD 869 million in February 2021. Cumulative value of plastics export during April 2021 – February 2021 was USD 12,161 million as against USD 8,856 million during the same period last year, registering a positive growth of 37.3%.

Exhibit 2: Trend in plastics export by India



PLASTICS EXPORT, BY PANEL

In February 2022, most of the product panels, especially Plastic raw materials; Plastic films & sheets; Consumer & houseware products; FRP & Composites; Packaging items - flexible, rigid; Medical items of plastics; and Miscellaneous products reported a strong positive growth in exports. Export of FIBC, woven sacks, woven fabrics, & tarpaulin, however, was in the negative.

Exhibit 3: Panel-wise % growth in plastics export by India

| Panel | Feb-21 | Feb-22 | Growth | Apr 20-Feb 21 | Apr 21-Feb 22 | Growth |
|---|----------|----------|--------|---------------|---------------|---------|
| | (USD Mn) | (USD Mn) | (%) | (USD Mn) | (USD Mn) | (%) |
| Consumer & houseware products | 57.3 | 70.4 | +22.9% | 516.5 | 736.0 | +42.5% |
| Cordage, fishnets & monofilaments | 20.3 | 25.6 | +26.2% | 186.7 | 249.3 | +33.5% |
| FIBC, woven sacks, woven fabrics, & tarpaulin | 134.3 | 133.4 | -0.7% | 1,129.2 | 1,543.1 | +36.7% |
| Floorcoverings, leathercloth & laminates | 52.8 | 55.8 | +5.7% | 436.6 | 570.3 | +30.6% |
| FRP & Composites | 30.0 | 39.7 | +32.0% | 273.1 | 412.5 | +51.1% |
| Human hair & related products | 29.1 | 32.7 | +12.4% | 331.6 | 724.4 | +118.4% |
| Medical items of plastics | 31.3 | 38.4 | +23.0% | 317.5 | 376.8 | +18.7% |
| Miscellaneous products & items nes | 59.1 | 70.0 | +18.5% | 466.8 | 793.5 | +70.0% |
| Packaging items - flexible, rigid | 42.7 | 51.4 | +20.5% | 437.8 | 562.8 | +28.5% |
| Plastic films & sheets | 123.1 | 169.8 | +38.0% | 1,385.6 | 1,845.6 | +33.2% |
| Plastic pipes & fittings | 20.1 | 23.8 | +18.3% | 165.7 | 259.7 | +56.7% |
| Plastic raw materials | 254.1 | 322.9 | +27.1% | 3,059.1 | 3,893.8 | +27.3% |
| Writing instruments & stationery | 14.8 | 19.1 | +29.2% | 149.2 | 193.6 | +29.7% |
| | 868.8 | 1,052.9 | +21.2% | 8,855.5 | 12,161.4 | +37.3% |

Source: Ministry of Commerce & Industry, Government of India

Export of **Consumer & house ware products** increased by 22.9% in February 2022 due to higher shipment of Tableware and kitchenware of plastics (HS code 392410); Plastic moulded suit cases (HS code 42021220); Other articles of sheeting of plastics (HS code 42023290); and Plastic tooth brushes (HS code 96032100).

Cordage, fishnets & monofilaments export were also up by 26.2% in February 2022 aided by improved sales of Monofilaments (HS code 39169028 and 39169090); and Other twine of polyethylene or polypropylene (HS code 56074900).

In case of **FIBC, woven sacks, woven fabrics, & tarpaulin**, exports in January 2022 were lower by 0.7% as Indian exporters reported a decline in sales of Dyed woven fabrics (HS code 54072030).

Export of **Floor coverings, leather cloth & laminates** gained 5.7% during February 2022 on account of higher sales of PVC floor coverings (HS code 391810) and Decorative laminates (Hs code 48239019).

Export of **FRP & Composites** was up by 32.0% due to increased sales of Articles of plastics and articles of other materials of heading 3901 to 3914, n.e.s (HS code 39269099).

Export of **Human hair & related products** was higher by 12.4% due to improved sales of Human hair, dressed, thinned, bleached or otherwise worked (HS code 67030010). It may be noted that export of Human hair, unworked, whether or not washed and scoured (HS code 05010010) was placed under restricted category by the Directorate General of Foreign Trade in the last week of January 2022.

Export of **Medical items of plastics** witnessed an increase of 23.0% in February 2022 due to higher sales of Syringes (HS code 90183100); and Cannulae (HS code 90183930).

Export of **Miscellaneous products & items nes** increased by 18.5% in February 2022 due to higher sales of Polypropylene articles nes (HS code 39269080); and Optical fibres, optical fibres bundles and cables (HS code 90011000).

Packaging items - flexible, rigid export increased by 20.5% on higher sales of Sacks and bags of polymers of ethylene (HS code 39232100); and Other articles for conveyance or packing of goods (HS code 39239090).

Plastic films & sheets witnessed an increase of 38.0% in exports during February 2022 due to higher shipments of Self-adhesive films and sheets of plastics, whether or not in rolls (HS code 3919); Sheets and films of polymers of ethylene (HS code 392010); Sheets and films of polymers of propylene (HS code 392020); Flexible films and sheets of polyethylene terephthalate (HS code 39206220); and Other plates, sheets, film, foil and strip, of plastics (HS code 392190).

Export of **Plastic pipes & fittings** witnessed a growth of 18.3% due to improved sales of Tubes of polyethylene (HS code 39172110); and Flexible tubes having a minimum burst pressure of 27.6 Mpa (HS code 39173100).

Plastics raw materials export was up 27.1% in February 2022 due to higher sales of Polypropylene (HS Code 39021000); PVC resin (HS Code 390410); Polytetrafluoroethylene (HS Code 390461); Epoxide resins (HS Code 390730) and Polyethylene terephthalate in various forms (HS Code 390761 and 390769).

Export of **Writing instruments & stationery** witnessed an increase of 29.2% in February 2022. This product segment, especially Ball point pens (HS Code 960810) did quite well after a period of difficult sales due to closure of schools and offices.

Exhibit 4: Details of % change seen in top 50 items of export

| HS Code | Description | Apr 20 – Feb 21 (USD Mn) | Apr 21 – Feb 22 (USD Mn) | Growth (%) |
|----------|---|-----------------------------|-----------------------------|---------------|
| 63053200 | Flexible intermediate bulk containers, for the packing of goods, of synthetic or man-made textile materials | 630.8 | 915.1 | +45.1% |
| 39021000 | Polypropylene, in primary forms | 621.2 | 620.9 | -0.0% |
| 39076190 | Polyethylene terephthalate: Other primary form | 443.4 | 713.9 | +61.0% |
| 39232990 | Sacks and bags, incl. cones, of plastics (excl. those of polymers of ethylene): Other | 341.4 | 458.7 | +34.4% |
| 67030010 | Human hair, dressed, thinned, bleached | 315.7 | 549.8 | +74.1% |
| 39269099 | Articles of plastics and articles of other materials of heading 3901 to 3914, n.e.s: Other | 269.2 | 406.2 | +50.9% |
| 39012000 | Polyethylene with a specific gravity of $\geq 0,94$, in primary forms | 285.2 | 192.3 | -32.6% |
| 39014010 | Linear low-density polyethylene, in which ethylene monomer unit contributes less than 95 % by weight of the total polymer content | 234.7 | 243.7 | +3.8% |
| 90011000 | Optical fibres, optical fibre bundles and cables (excl. made-up of individually sheathed fibres of heading 8544) | 205.4 | 414.2 | +101.7% |
| 48239019 | Decorative laminates | 189.2 | 244.4 | +29.2% |
| 39206220 | Plates, sheets, film, foil and strip, of non-cellular polyethylene terephthalate: Flexible, plain | 185.4 | 235.7 | +27.1% |
| 39269080 | Articles of plastics and articles of other materials of heading 3901 to 3914: Polypropylene articles, nes | 174.9 | 265.6 | +51.9% |
| 39202020 | Plates, sheets, film, foil and strip, of non-cellular polymers of ethylene: Flexible, plain | 170.0 | 303.1 | +78.3% |
| 39232100 | Sacks and bags, incl. cones, of polymers of ethylene | 144.3 | 201.7 | +39.8% |
| 39076990 | Polyethylene terephthalate: Other primary form | 137.3 | 269.7 | +96.5% |
| 59039090 | Textile fabrics impregnated, coated, covered or laminated with plastics other than polyvinyl chloride or polyurethane: Other | 134.1 | 166.4 | +24.0% |
| 39239090 | Articles for the conveyance or packaging of goods, of plastics: Other | 128.5 | 158.1 | +23.0% |
| 39069090 | Acrylic polymers, in primary forms (excl. polymethyl methacrylate): Other | 107.4 | 250.0 | +132.8% |
| 39202090 | Plates, sheets, film, foil and strip, of non-cellular polymers of ethylene: Other | 107.1 | 162.8 | +52.0% |
| 90015000 | Spectacle lenses of materials other than glass | 105.1 | 114.3 | +8.8% |
| 39011010 | Linear low-density polyethylene, in which ethylene monomer unit contributes 95 % or more by weight of the total polymer content | 109.3 | 79.5 | -27.3% |
| 54072090 | Woven fabrics of strip or the like, of synthetic filament, incl. monofilament of ≥ 67 decitex and with a cross sectional dimension of ≤ 1 mm: Other | 90.7 | 119.4 | +31.7% |

Export Performance

| | | | | |
|----------|---|------|-------|--------|
| 39206290 | Plates, sheets, film, foil and strip, of non-cellular polyethylene terephthalate: Other | 92.8 | 103.7 | +11.7% |
| 39046100 | Polytetrafluoroethylene, in primary forms | 89.8 | 150.4 | +67.5% |
| 90183930 | Cannulae | 89.9 | 100.1 | +11.3% |
| 39219099 | Plates, sheets, film, foil and strip, of plastics, reinforced, laminated, supported or similarly combined with other materials, unworked or merely surface-worked or merely cut into squares or rectangles: Other | 89.6 | 113.3 | +26.5% |
| 39011020 | Low density polyethylene | 89.8 | 54.3 | -39.5% |
| 39219096 | Plates, sheets, film, foil and strip, of plastics: Flexible, laminated | 81.3 | 80.1 | -1.5% |
| 96081019 | Ball-point pens | 77.4 | 96.5 | +24.8% |
| 39241090 | Tableware and kitchenware, of plastics: Other | 74.6 | 89.4 | +19.7% |
| 39072090 | Polyethers in primary forms (excl. polyacetals): Other | 78.3 | 46.3 | -40.9% |
| 56074900 | Twine, cordage, ropes and cables of polyethylene or polypropylene, whether or not plaited or braided and whether or not impregnated, coated, covered or sheathed with rubber or plastics | 70.6 | 113.5 | +60.7% |
| 95030030 | Toys of plastics | 71.0 | 92.9 | +30.8% |
| 39199090 | Self-adhesive plates, sheets, film, foil, tape, strip and other flat shapes, of plastics, whether or not in rolls > 20 cm wide: Other | 70.7 | 91.5 | +29.4% |
| 39219094 | Plates, sheets, film, foil and strip, of plastics: Flexible, metallised | 69.5 | 95.2 | +36.9% |
| 39206919 | Plates, sheets, film, foil and strip, of non-cellular polyesters: Other | 66.5 | 83.6 | +25.8% |
| 96032100 | Tooth brushes, incl. dental-plate brushes | 62.5 | 85.1 | +36.1% |
| 59031090 | Textile fabrics impregnated, coated, covered or laminated with polyvinyl chloride: Other | 61.6 | 65.0 | +5.6% |
| 39023000 | Propylene copolymers, in primary forms | 62.8 | 54.4 | -13.4% |
| 39140020 | Ion exchangers of polymerisation | 59.2 | 68.7 | +16.0% |
| 39119090 | Polysulphides, polysulphones and other polymers and prepolymers produced by chemical synthesis, n.e.s., in primary forms: Other | 54.1 | 69.5 | +28.5% |
| 39204900 | Plates, sheets, film, foil and strip, of non-cellular polymers of vinyl chloride, containing by weight < 6% of plasticisers | 53.0 | 64.5 | +21.6% |
| 39241010 | Tableware and kitchenware, of plastics: Insulated ware | 50.8 | 67.3 | +32.5% |
| 39129090 | Cellulose and chemical derivatives thereof, n.e.s., in primary forms (excl. cellulose acetates, cellulose nitrates and cellulose ethers): Other | 53.2 | 68.2 | +28.2% |
| 39095000 | Polyurethanes, in primary forms | 52.2 | 72.5 | +38.9% |
| 39235010 | Stoppers, lids, caps and other closures, of plastics | 50.0 | 62.4 | +24.6% |
| 39206929 | Plates, sheets, film, foil and strip, of non-cellular polyesters: Other | 47.4 | 64.1 | +35.3% |

Export Performance

| | | | | |
|----------|--|------|-------|---------|
| 54072030 | Woven fabrics of strip or the like, of synthetic filament, incl. monofilament of ≥ 67 decitex and with a cross sectional dimension of ≤ 1 mm: Dyed | 43.7 | 20.9 | -52.2% |
| 39073010 | Epoxy resins | 41.3 | 106.9 | +158.7% |
| 39011090 | Polyethylene with a specific gravity of < 0.94 , in primary forms: Other | 43.5 | 79.3 | +82.4% |

Source: Ministry of Commerce & Industry, Government of India



Sunanda Kadam

GM-India,
Intertek Assuris

What are FCM Regulations?

Since the advent of commercial production and the extensive use of Food Contact Materials (FCMs) in day-to-day life, the aspect of food safety arising from FCMs has been an important topic of interest, both in terms of research and regulations. Based on ongoing scientific findings, development of new materials, and growing focus on sustainability, these regulations are also being moulded from time to time across the world. Though these regulations differ between countries, they are all formulated with the primary objective of ensuring consumer food safety in addition to ensuring compliance with, and strengthening of, the regulatory framework globally.

Through our interview with Ms. Sunanda Kadam, GM-India, Intertek, we have endeavoured to bring our readers an overview of FCM regulations in the UK and several other countries with an emphasis on important aspects like safeguards, sustainability, and measures of EU framework regulations.

(Interview)

How do you define Food Contact Regulations? What do they imply?

Food contact materials are those that are intended to be brought into contact with food or are already in contact with food and were intended for that purpose, and can reasonably be expected to be brought into contact with food or transfer their constituents to the food under normal or foreseeable use. This includes direct or indirect contact. Global food packaging legislations are complicat-

ed. There are complex differences from country to country that call for careful consideration from the manufacturers of food contact materials. Whether an organization is well-versed in this type of legislation or is still learning the ropes, expert analysis can be helpful. Careful testing and consultation can help clarify regulations, evaluate packaging materials, and ensure compliance.

What are the various types of polymer-based FCMs commonly being used today? What materials are not permitted for use as FCMs?

Some of the most common plastics used by the food packaging industry are:

- Polyethylene terephthalate (PET)
- High-density polyethylene (HDPE)
- Low-density polyethylene (LDPE)
- Polypropylene (PP)
- Polystyrene (PS)
- Polyamides (Nylon)

Plastic products not complying with the requirements of Regulation on materials intended to come into contact with food must not be used. For example, disposable PVC plastic products (“vinyl plastics”) containing certain phthalates (benzyl butyl phthalate [BBP], diisononyl phthalate [DINP], and diisodecyl phthalate [DIDP]) must not be used. Another example is bisphenol A (BPA). The migration of BPA from plastic materials and articles shall not exceed a specific migration limit of 0.05 mg of BPA per kg of food (mg/kg). BPA shall not be used in the manufacture of polycarbonate feeding bottles for infants and shall not be used in the manufacture of polycarbonate cups or feeding bottles that, due to their anti-spill characteristics, are intended for infants and young children.

Is use of PCR or recycled plastics in the manufacturing of packaging permissible? What are the challenges or limitations of such use?

A lot of importers are encouraging manufacturers to use PCR in the packaging applications. Specified requirements and rules have been laid out, for example in Europe, the U.S., and now also in India, for the recycled materials in the packaging. The concerned authorities are well aware of the contaminants from post-consumer plastic that may appear in the final product. Therefore, each proposal for using recycled plastic is evaluated strictly to ensure the final packaging is safe for the use in food contact applications.

How can one ensure sustainability goals are met when manufacturing FCMs?

“Sustainable”, “recyclable”, “reusable”, and “biodegradable” packaging are common buzzwords nowadays. Sustainable packaging refers to the sourcing, development, and use of packaging solutions that have minimal environmental impact and footprint. Manufacturers should develop strategies which includes rethinking package design, carbon footprinting, recycled content, extended producer responsibility, and evaluation of environmental impacts through the life cycle of the package—from raw materials to disposal.

What internationally recognized and accepted quality/testing standards are used to ensure product safety/compliance?

There are number of regulations for the food contact materials in several jurisdictions across the globe. In Europe, it is EC 1935/2004; in the U.S., there are requirements under the US Food and Drug Administration (FDA); in India there are rules under the Food Safety and Standards Authority of India (FSSAI); in China there are the GB standards; in Japan there is the Japanese Food Sanitation Act; and so on. Each of these regulations have specific rules for testing food contact materials, such as overall migrations, specific migrations, restricted substances, and so on.

What does the EU Legislation for FCMs entail?

Europe has a harmonized legal framework (Regulation EC 1935/2004) for the safety of FCMs. Regulation EC 1935/2004 requires that all FCMs and articles (manufactured, imported and sold in the EU) intended to come into contact with food comply with the framework. All food contact materials covered by a specific measure in Europe need to be

accompanied by a written Declaration of Compliance (DoC) stating that they comply with the regulations applicable to them. In addition, supporting documentation and traceability through labelling or documentation in the supply chain should be ensured. Companies should be able to identify one step prior and one step later in the supply chain. Intertek’s regulatory food contact experts are available on the ground in several EU member states to provide guidance in understanding the various requirements under the European FCM regulations for all types of FCMs and articles.

What are the regulations followed in other countries? Please state examples.

Examples of global food contact regulations include:

- European Framework Regulation (EC) 1935/2004;
- FDA Regulations;
- China Regulations;
- Japan Regulations; and
- Other global regulations (per legislation in Canada, Latin America, Mercosur, South Korea, Israel, India, and Southeast Asia).

What are the FCM Regulations being followed in India?

In India we have Food Safety and Standards (Packaging) Regulations, 2018. These regulations may be called the Food Safety and Standards (Packaging) Regulations, 2018, which have been in force since 2019. On the date of their publication in the Official Gazette, Food Business Operators shall comply with all the provisions of these regulations by 01 July 2019.

What measures do Indian manufacturers need to take to ensure global compliance in terms of safety, quality, sustainability, traceability, etc.?

Materials and articles intended to come into contact with food are subject to composition and testing requirements based on the legislation of the regions they are marketed in. These food contact regulations are complex, and it can be difficult to determine what requirements apply to your product. Manufacturers should ensure their food contact materials and products comply with applicable regulations and are of suitable purity for intended uses. Some important actions to achieve compliance might include:

- Analysing the detailed composition of materials and substances used in the manufacturing process of your FCM or article to determine a compliance strategy.
- Designing and optimizing the appropriate testing protocols for evaluating compliance and ensuring safety of food contact materials and articles.
- Completing a Declaration of Compliance (DoC)—a DoC is required at all stages of production and marketing (excluding the retail stage), and it needs to be supported by appropriate underlying documentation.
- Outlining testing requirements—this includes requirements for testing of overall and specific migration, comprehensive guidance on selecting simulants, and conditions for testing.

How can Intertek help manufacturers become more compliant and ensure good manufacturing practices?
















A Good Manufacturing Practice (GMP) program ensures food contact materials and products comply with applicable regulations. Our GMP program addresses the safety of food contact materials and products by implementing reasonable control processes and establishing appropriate quality systems. Under our GMP program, Intertek addresses the whole production cycle of food contact material and products. It starts with selection of materials, quality control of incoming raw material, and proper storage, and moves on to production equipment cleaning procedures, manufacturing facility housekeeping procedures, material traceability and product quality, management of change, employee training and facility auditing, product packaging, storage, and shipping, and more.

Ms. Sunanda Kadam, General Manager-India, Intertek Assuris, has over 20 years of experience in chemical and regulatory compliance. Currently, she supports clients in Central, South Asia, and the Middle East region in complying with the chemical, food contact, environmental regulations. She has extensive knowledge on global food contact regulations, including packaging sustainability REACH regulations, Proposition 65, and more.

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POLYMER PRICE TRACKER (DOMESTIC MARKET) FEBRUARY 2022

| | | | |
|---|---|---|--|
| High Density Polyethylene (HDPE) | | | <ul style="list-style-type: none"> • HDPE prices increased by Rs 4500 per MT in February 2022. Prices were up by Rs 1000 per MT in January 2022 and lower by Rs 6000 per MT in December 2021. • In February 2022, HDPE prices were increased by Rs 1000 per MT in the first week, Rs 2500 per MT in the second week, and Rs 1000 per MT later. |
|  |  |  | |
| Dec-21 | Jan-22 | Feb-22 | |
| Linear Low-Density Polyethylene (LLDPE) | | | <ul style="list-style-type: none"> • LLDPE prices increased by Rs 6500 per MT in February 2022. Prices were up by Rs 1500 per MT in January 2022 and lower by Rs 9000 per MT in December 2021. • In February 2022, LLDPE prices were increased by Rs 2000 per MT in the first week, Rs 3500 per MT in the second week, and Rs 1000 per MT later. |
|  |  |  | |
| Dec-21 | Jan-22 | Feb-22 | |
| Low Density Polyethylene (LDPE) | | | <ul style="list-style-type: none"> • LDPE prices increased by Rs 4000 per MT in February 2022 after a decline of Rs 2000 per MT in January 2022 and Rs 11500 per MT in December 2021. • In February 2022, LDPE prices were increased by Rs 1000 per MT in the first week, Rs 2000 per MT in the second week, and Rs 1000 per MT later. |
|  |  |  | |
| Dec-21 | Jan-22 | Feb-22 | |
| Polypropylene (PP) | | | <ul style="list-style-type: none"> • PP prices jumped by Rs 9500 per MT in February 2022. Prices had increased by Rs 1000 per MT in January 2022 and fallen by Rs 12000 per MT in December 2021. • In February 2022, PP prices were increased by Rs 3000 per MT in the first week, Rs 5000 per MT in the second week, and Rs 1500 per MT later. |
|  |  |  | |
| Dec-21 | Jan-22 | Feb-22 | |
| Polyvinyl Chloride (PVC) | | | <ul style="list-style-type: none"> • PVC prices firmed up by Rs 2000 per MT in February 2022 after witnessing a decline of Rs 9000 per MT in January 2022 and Rs 7000 per MT in December 2021. • In February 2022, PVC prices were increased by Rs 2000 per MT in the second week. Thereafter no changes were announced. |
|  |  |  | |
| Dec-21 | Jan-22 | Feb-22 | |

Source: Industry, Plexconcil Research



Slide Fasteners or Zippers of Plastics

Invented about 100 years ago, Slide fasteners or Zippers may be described as a fastening device consisting of two parallel toothed tracks of metal or plastic teeth on adjacent edges of an opening that are interlocked by a slider with a tab. Zippers find use in a variety of products including garments, bags, shoes, sports goods and other fashion accessories. Zippers are available in metal and non-metal. Over the years, Zippers of plastic have gained popularity over those of metal as they are not only more convenient for attaching garments but are also waterproof and available in a variety of colours. The

product is classified under Subheading 960719 of the Harmonized System (HS) of Coding. World-wide import of Zippers, of plastic, is valued at over USD 1.0 billion per year.

- In 2020, top-5 exporting countries of Zippers, of plastic, were: China (48.1%), Taiwan (10.9%), Hong Kong (9.7%), Japan (4.8%), and Italy (3.0%).
- Likewise, top-5 importing countries of Zippers, of plastic, were: Viet Nam (22.5%), China (6.9%), Bangladesh (6.0%), Cambodia (6.0%), and Hong Kong (6.0%).

India is a net importer of Zippers, of plastic. In 2021, India imported 3362 tonnes of Zippers of plastic, valued at USD 17.76 million from the world. China was the major supplier both in terms of value and volume.

| Source Country | Value (USD Mn) | Source Country | Qty. (Tonnes) |
|----------------|----------------|--------------------------|---------------|
| China | 10.77 | China | 3135 |
| Hong Kong | 3.45 | Hong Kong | 114 |
| Taiwan | 1.19 | Taiwan | 49 |
| Canada | 0.45 | Viet Nam | 18 |
| Viet Nam | 0.36 | Bangladesh | 11 |
| Japan | 0.26 | Japan | 6.9 |
| Bangladesh | 0.21 | Canada | 5.6 |
| Germany | 0.19 | Germany | 4.0 |
| France | 0.17 | United States of America | 2.8 |
| Austria | 0.15 | Austria | 2.6 |

Source: Department of Commerce, Govt. of India, Plexconcil Research



In 2021, India exported 626 tonnes of Zippers of plastic, valued at USD 8.73 million to the world. While Jordan was the top export destination in terms of value, Sri Lanka was the top destination in terms of volume.

| Destination Country | Value (USD Mn) | Destination Country | Qty. (Tonnes) |
|--------------------------|----------------|--------------------------|---------------|
| Jordan | 2.30 | Sri Lanka | 87 |
| Sri Lanka | 1.53 | United Arab Emirates | 76 |
| Egypt | 0.92 | Jordan | 73 |
| Bangladesh | 0.89 | Bangladesh | 68 |
| United States of America | 0.83 | United States of America | 68 |
| United Arab Emirates | 0.45 | Nepal | 59 |
| Nepal | 0.38 | Egypt | 36 |
| Netherlands | 0.38 | Peru | 25 |
| Russia | 0.18 | Saudi Arabia | 23 |
| Israel | 0.16 | Netherlands | 21 |

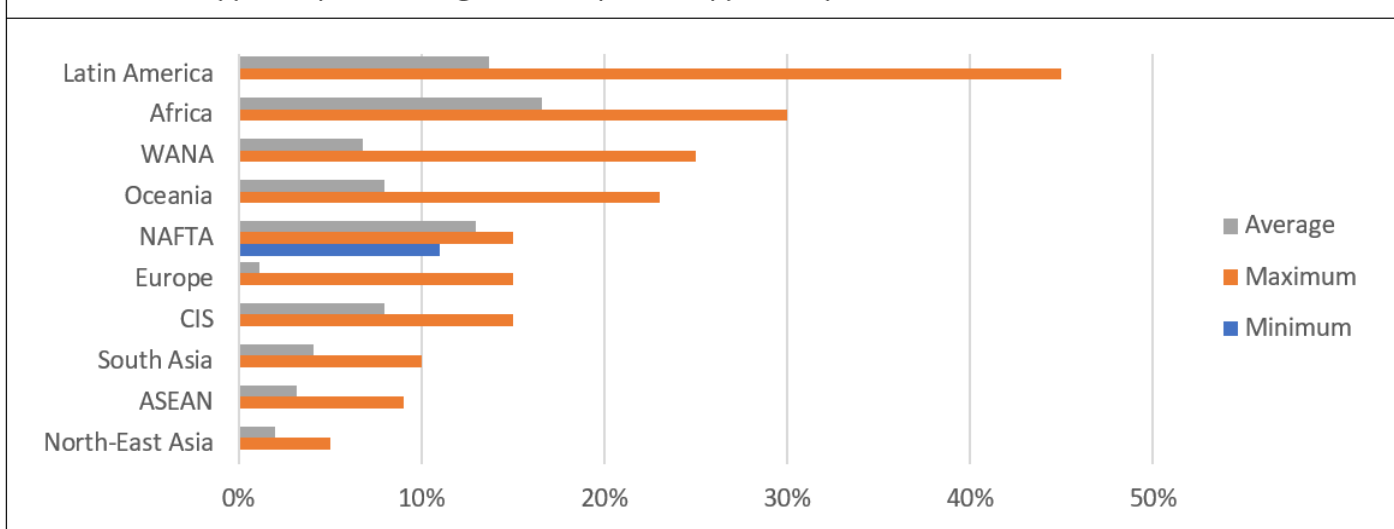
Source: Department of Commerce, Govt. of India, Plexconcil Research

Indian firms dealing in Zippers, of plastic, have immense potential to export to destinations like Bangladesh, Cambodia, China, Indonesia, Jordan, Netherlands, Sri Lanka, United Arab Emirates, United States of America, and Viet Nam.

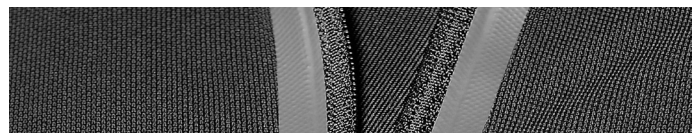
There is zero customs duty applicable on import of Zippers, of plastic, from India in the European Union due to Generalised Scheme of Preferences Scheme; and in a few ASEAN countries like Thailand, and Philippines due to India-ASEAN Free Trade Agreement. Import of Zippers, of plastic, from India is eligible for zero customs duty in Sri Lanka due to India – Sri Lanka FTA.

Unfortunately, several countries in Latin America, Africa, WANA, Oceania, and North America do not accord any preferential treatment to Zippers, of plastic, exported from India due to which the average customs duty faced on these products is high.

Effective tariff applied by various regions on import of Zippers, of plastic, from India



Source: Market Access Map, Plexconcil Research



Industry Speak

Interview with Saunil Shah, Director, SVP Packing Industry Pvt Ltd.

What are the key factors driving the growth of the product segment? What are the emerging new applications for the product?

The focus on sustainability has picked up in the world, covering people of all ages and types. This has led to consumers becoming more aware of the packaging their products come in. Earlier there was a focus on the aesthetics of the packaging but now people are also more cognizant of the material that it is made off and whether the packaging is reusable. Along with sustainability there is also an essence of convenience that is needed. Since people don't want to empty food contents etc into containers. This is where Zippers come into play. They enable any flexible packaging to be made reusable. When the packing material itself is re-usable it adds a factor of convenience to the end user.

New Applications

- Fresh produces
- Packed Foods
- Ready to eat foods

- Retort Applications
- Hygiene
- Medical
- Garments
- Pharma

What are the new advancements in the product or technologies being used in the manufacturing today?

- Online applications on FFS machines
- Slider Zippers for repetitive usage
- Biodegradable
- Compostable
- Child resistant zipper
- Powder prevention Zipper
- Leak proof Zipper
- Vacuum Zipper
- Biodegradable
- Compostable
- Special zippers for Flex boards used in Exhibitions and Hoardings

What are the major challenges faced by the manufacturers/ exporters of the product?

- Non availability of containers
- Major changes in shipping company charges
- Lack of skilled manpower
- Constraints of R&D
- Cumbersome export paperwork

What are the opportunities for India's exports of the product?

The opportunities are tremendous as this a highly technical product and the market is growing. There must be high focus on quality and consistency and if the same is maintained there is a wide opportunity for exports that can be explored.

Who are India's major competitors on a global level? How can we overcome competition?

Major Competitors are:

- Zip-Pak, ITW Group
- Presto, Reynolds
- El-Zip, Poland
- Sanzip, Japan
- Takebishi, China

To overcome the challenges from our competitors, we need to focus on R&D, accreditations, constant innovation, and marketing along with ample finance to implement the same.



MEXICO

Economic overview

Mexico is located in North America, sharing land borders with the United States of America to the north and Guatemala to the south. It has an area of 1.9 million square kilometres and a population of 129 million. Mexico is a large economy with a strong manufacturing base. However, its fortunes are tied to the United States of America which is its most significant trade partner. Though the COVID-19 pandemic deeply hurt the Mexican economy, increased exports to the United States of America and higher inward remittances from Mexicans living abroad has supported its recovery.

As of March 10, 2022, the S&P's rating for Mexico is BBB (Negative); Moody's rating stands at Baa1 (Negative); and Fitch has a reported rating of BBB- (Stable).

Mexico is also one of the WTO members with the greatest number of Free Trade Agreements. Mexico has trade agreements with several countries in Latin America & Caribbean, North America, Association of Southeast Asian Nations (ASEAN), European Union, and Oceania. Mexico has a separate trade agreement with European Free Trade Association (EFTA), Israel, Japan and the United Kingdom.

| Economic indicators | | 2019 | 2020 | 2021 |
|---------------------------|-------------|--------|-------|-------|
| Nominal GDP | USD Billion | 397.9 | 407.1 | 467.5 |
| Nominal GDP per capita | USD | 10,029 | 8,404 | 9,967 |
| Real GDP growth | % | -0.2 | -8.3 | 6.3 |
| Total population | Million | 126.6 | 127.8 | 129.0 |
| Average inflation | % | 3.6 | 3.4 | 5.4 |
| Total merchandise exports | USD Billion | 450.9 | 460.6 | 417.0 |
| Total merchandise imports | USD Billion | 464.2 | 455.2 | 383.0 |

Amit Shah, Director, Mindpower Finsource Services Pvt Ltd.

Our company is into packaging machinery, particularly printing and extrusion machines and it is my opinion that we do have a good potential in Mexico and surrounding Latin American countries. However, we face stiff competition from China and Taiwan who are much more competitive in terms of pricing and are quite aggressive in their pursuit. This can be challenging for all exporters. Having said that, Indian machinery is much better in terms quality, but we have seen that importers often seek the more lucrative offers from Chinese companies. To combat such challenges and increase our exports to Mexico, we need much more support from the Govt. While there is not much difference in metal prices between India and China, they definitely enjoy more incentives and subsidies due to which they are able to offer products at a much more competitive rate.

In India, manufacturers are also commonly riddled with issues pertaining to labour. We need a better or smoother labour policy that not only safeguards the interests of the workers, but also favours the factory owners too. It should be more balanced to protect and enhance productivity & output as well as personnel welfare. I believe that benefits and policies for especially engineering goods exports is inadequate presently. Duty drawback is low, RoDTEP is not very effective as the rate is very low, etc. Unlike commodities or other projects, the difference in our pricing versus China is huge. Hence, we need a framework that will make us better able to compete.

In terms of technology, India is way ahead of Mexico so while support of IMBC or ANIPAC may help bolster exports or bilateral trade of some product segments in plastics, there may not be much in it for the engineering sector. Having said that, we have been working on developing business in Mexico for quite some time now and the outcome has been less than desirable. The language barrier too makes it hard to communicate at times.

Trade overview

India and Mexico enjoy cordial trade relations. Mexico is among the top-40 trade partners of India. In 2021, India and Mexico engaged in bilateral trade worth USD 8.32 billion. During the year, India's exports to Mexico were valued at USD 4.16 billion while India's imports from Mexico were also valued at USD 4.16 billion.

The major items of export (2-digit HS) from India to Mexico are motor vehicles (USD 1388 million), aluminium and articles thereof (USD 444 million), organic chemicals (USD 396 million), and machinery and mechanical appliances (USD 294 million). Likewise, major items of export (2-digit HS) from Mexico to India are mineral fuels (USD 3359 million) and electrical machinery and equipment (USD 218 million).

Within plastics, the trade is in favour of the India with exports of USD 173.3 million to Mexico and a trade surplus of USD 143.3 million. India's plastics exports to Mexico primarily comprise of the following:

- Plastic raw materials (33.6%)
- Plastic sheets & films (29.6%)
- Floorcoverings, leathercloth & laminates (9.4%)
- Consumer & houseware products (5.3%), and
- FIBC, woven sacks, woven fabrics & tarpaulin (5.2%)



Mexico's annual plastics imports are valued at USD 30 billion approx. Its plastic imports are largely catered to, by United States of America (60.9%) and China (14.5%). However, India also has a relatively good standing in some of the plastic product imports by Mexico:

- FIBC, woven sacks, woven fabrics & tarpaulin – Market share of 3.1% (Rank 4)
- Writing instruments & stationery – Market share of 6.4% (Rank 4)
- Plastic sheets & films – Market share of 1.2% (Rank 9)

Mallikarjun Jamdar, Marketing Head, Synthetic Packers Pvt Ltd.

Having recently participated at the Plastimagen 2022 show in Mexico, we have observed that there is a good scope for Stretch and Barrier film in Mexico from the range of products we have. We are yet to start business in Mexico, but we do believe that it will be along the same line with business we do with other countries. Of course, time will tell going forward, but we do remain optimistic. Language is a big problem there as the majority of people don't understand or speak English.

The Indian- Mexico Business Chamber, which is quite active in Mexico has access to the import data for products imported in Mexico and as they are in a position to track imports using HSN codes, they can certainly help Indian manufacturers connect with prospective buyers in the country.

Having said that, our industry still continues to struggle with huge freight charges and limited availability of containers and given the surge in freight charges, presently it's very difficult to compete with local manufacturers there.

In the long run though, for our country to enhance exports to Mexico and capture the opportunities there, the Govt must consider ETA / EPA agreements, better incentive schemes to exporters and subsidies to participate at exhibitions in the country/ region so Indian industries can promote and showcase their products better.



Export Potential for India

Our internal research indicates that India's export of plastics to Mexico has the potential to grow by over USD 7.3 billion. Details of product panels and their export potential to Mexico are provided below:

| Product panel | Mexico's import from India | Mexico's import from world | India's export to world | Export potential for India |
|---|----------------------------|----------------------------|-------------------------|----------------------------|
| | USD Million | USD Million | USD Million | USD Million |
| Plastic raw materials | 21.5 | 8,102.2 | 3,312.8 | 2,256.4 |
| Plastic films and sheets | 33.9 | 4,822.6 | 1,451.7 | 1,299.7 |
| Consumer & houseware products | 9.2 | 3,807.9 | 1,034.6 | 777.5 |
| Medical items of plastics | 6.7 | 2,809.7 | 776.8 | 766.0 |
| Miscellaneous products and items nes | 5.3 | 4,148.8 | 755.9 | 593.8 |
| Floorcoverings, leathercloth & laminates | 16.4 | 787.1 | 554.6 | 488.0 |
| Packaging items - flexible, rigid | 2.7 | 2,437.5 | 462.7 | 460.0 |
| FIBC, Woven sacks, Woven fabrics, Tarpaulin | 6.2 | 346.0 | 1,209.8 | 317.3 |
| Plastic pipes & fittings | 2.9 | 1,320.5 | 170.9 | 125.6 |
| Writing instruments & stationery | 4.5 | 262.7 | 173.5 | 124.8 |

Source: TradeMap, Plexconcil Research



Turnkey Solutions Propelling Antimicrobial Coatings into the Future

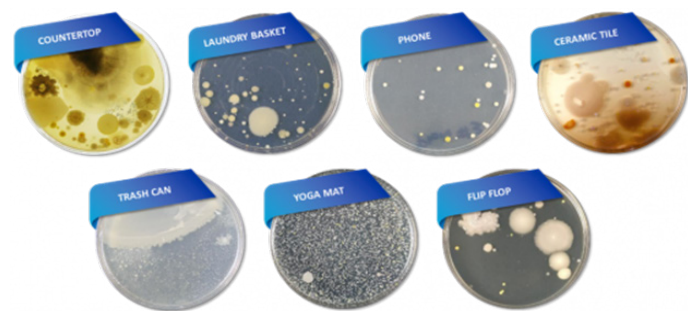


Figure 1. Examples of surfaces that are susceptible to microbial growth.

The COVID-19 pandemic put the spotlight on microbes and cleanliness, creating more interest than ever before in antimicrobial coatings. However, bringing new innovations to the industry is not without its challenges, requiring the continual development of novel tools and procedures that can be seamlessly and invisibly incorporated into coatings. Microban Product Development Engineer, James Rapley, is a guest writer for the blog this month, helping to go deeper in our exploration of antimicrobial coatings and solutions to redefine clean.

The antimicrobial protection challenge

Microbes are found everywhere. These small living organisms, which include bacteria, molds, fungi, algae, and viruses can rapidly multiply in different environments, making them hard to control in nature. They are frequently found in undesirable locations (Figure 1), where they can cause illnesses, food spoilage, surface stains, bad odors and reduced product life due to contamination or degradation.

Numerous treatments are available that are specifically designed to help reduce the growth and spread of microbes, many of which are tailored for particular environments. However, it is important to note that standard cleaning products, and even surface disinfectants, often have limited residual activity once they dry, especially on high-touch items such as countertops and phones that are used repeatedly on a daily basis. In addition, not all antimicrobials address all types of microorganisms.

One way of addressing these challenges is the implementation of universal lifetime preventive measures that never wear away and inhibit the growth of contaminants, helping to keep surfaces cleaner and fresher for longer. Antimicrobial technologies of this kind can be built into some products at the point of manufacture or, potentially, added in the form of a surface-adherent antimicrobial coating that acts as a barrier to allow the technology to effectively attack and reduce the microbe population.

This 'always on' protection provides the perfect complement to 24-hour residual cleaning products that are designed to kill 99.9 % of surface bacteria during routine cleaning. This helps to maintain surface cleanliness for longer in residential, healthcare and professional environments. The combined use of 24/7 product protection

and 24-hour residual cleaning products plays an indispensable role, creating a thorough system of preventive measures to help improve overall environmental cleanliness.

The way of the future

The global antimicrobial coatings industry is expected to expand at a compound rate of 13 % from 2021 to 2028,¹ due in no small part to the COVID-19 pandemic triggering a rapid interest in the application of this technology to coatings. The pandemic has made consumers far more aware of the need for antimicrobial features, not only in homes and workplaces, but also in buildings such as schools and hospitals where cleanliness is critical.

With 64 % of adults now prepared to pay more for a product with built-in antimicrobial product protection,² coating developers are acutely aware that the day will come when customers expect this as standard, in the same way that safety airbags have become the norm in modern motor vehicles. Antimicrobial capabilities in coatings will soon be an expectation – rather than something that is ‘nice to have’ – that building specifications in the construction industry will come to demand. As the world emerges from the COVID-19 pandemic, forward-thinking companies that invest in this technology sooner rather than later will benefit from opportunities to differentiate themselves as market leaders and keep well ahead of the curve.

Developing turnkey solutions for today’s world

Companies are beginning to recognize the need to implement a rapid and cost-effective holistic approach, to help accelerate the creation of a successful product in a given time period. Across the globe, researchers and engineers have strived to come up with innovations to drive the continuing success of their companies.

In the coatings industry, this has resulted in the development of new or improved processes such as mixing, heat and UV curing processes, and application methods ranging from padding for textiles and impregnation to powder and spray coating. These practices have enabled developers to create new formulations incorporating additives with properties such as antimicrobial protection for a range of different products, expanding the scope of coatings beyond just paints.

Research and development are just one part of establishing antimicrobial functionality in coating applications. It is equally important to evaluate the short- and long-term consequences of the approach taken in respect of safety and applicable regulations. Navigating the regulatory landscape can be quite challenging, with

companies often requiring a great deal of support to categorically ensure that any costly violations or false claims for products are avoided.

Each and every antimicrobial coating on the market must comply with all associated regulations – from manufacture and testing to marketing and distribution – across multiple regions, to safeguard both manufacturers and consumers. This situation is further complicated by the fact that every jurisdiction handles antimicrobials differently; some regulate them as chemical substances and others as pesticides or biocidal additives.

Key considerations of current coating techniques and processes

Once safety and regulatory compliance is assured, work can begin on finding ways to incorporate antimicrobial additives into the manufacturing process. One way of achieving this is simple addition of antimicrobial agents, but this has many challenges, including material form and appearance, and handling (Figure 2).

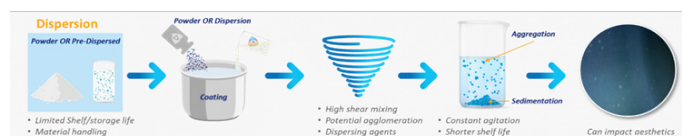


Figure 2. Current coating process using powder or pre-dispersion.

Powder or pre-dispersion antimicrobials are often moisture sensitive and easily agglomerate, which limits their shelf and storage life. Dispersions have a tendency to precipitate over time (Figure 3), reducing the amount of active ingredient available in the manufacturing process. However, this can be addressed by high shear mixing followed by constant agitation once the powder or dispersion has been added to the coating. By the same token, if the additive is too saturated in the mixture, aggregation and sedimentation can lead to undesirable aesthetics and shorten the shelf life of the coating. This can be an even greater challenge when working with thin or high gloss coatings.

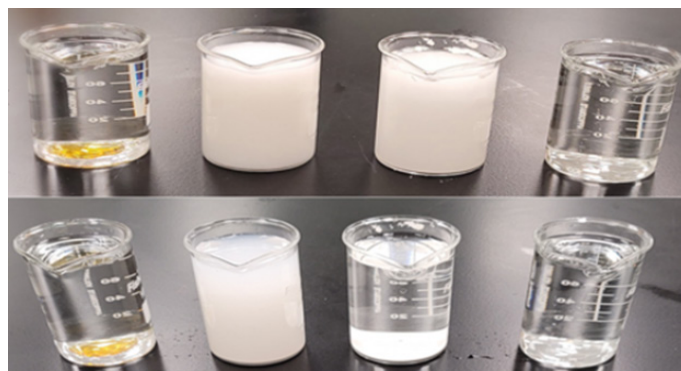


Figure 3. Left to right: Liquid, dispersion, powder, and turnkey coating (top).

Precipitation and agglomeration start to occur after 72 hours; the turnkey coating is easily mixed and remains stable for longer, improving shelf life and processability.

A further complication is that the availability of limited capacity mixers at the manufacturing site may mean that these steps are not as efficient as they could be, ultimately resulting in wasted materials and unfavorable outcomes that do not meet the regulators' requirements, which can be very costly for the company.

In contrast, using fully integrated antimicrobials with a longer shelf life, that are easier to store and handle, makes the production process more robust. This can also make mixing the different components quicker and cheaper, and is a relatively straightforward approach that can be easily adapted into a more standardized workflow using common industrial grade mixers that are already on site (Figure 4).



Figure 4. Improved process for fully integrated antimicrobial technology in coatings.

Ensuring compatibility

Once the manufacturing process has been established, attention turns to choosing the most appropriate antimicrobial chemistry for a certain application. The properties of each technology must be fully understood, along with their potential compatibility with the other constituents of the mixture (Figure 5). Key questions need to be asked about the type of system and chemistry before outlining and creating procedures and tools that allow the developers to make very rapid decisions without any guesswork.

Many antimicrobial technologies are based on metals – predominantly silver or zinc. Because of this, the electrochemical impact that the charged ion or dispersing agent would have on the overall system is a significant contributing factor. Antimicrobials that are compatible with a set list of ingredients and a particular application method, where the conditions can be adjusted, are a necessity. This can be more challenging when using water- rather than solvent-based systems – for example, an incorrect charge can cause destabilization of the former but not the latter – and efforts to resolve this issue are ongoing.

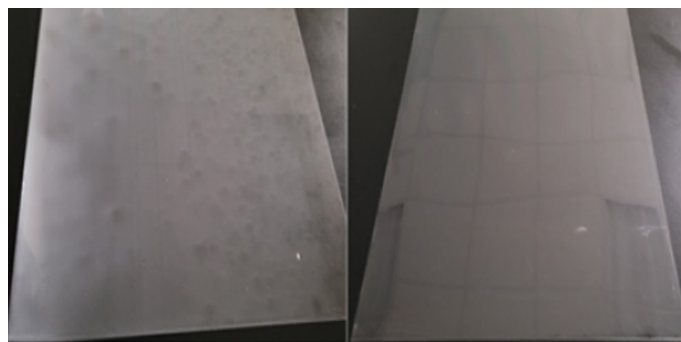


Figure 5. Incorrect choice of antimicrobial can lead to visual defects. Left: polyurethane chemistry mixed with an incompatible antimicrobial leads to visual defects after drying. Right: turnkey coatings are compatible with a wide range of chemistries and have minimal visual impact.


Technical parameters, such as viscosity, pH, and durability, must be balanced with the consumers' needs for style, color, and finish. This is already a finely-tuned and intricate process, and the addition of even more technologies further increases the complexity. Water chemistries are inherently less robust and less effective at accepting a suite of ingredients than their solvent-based counterparts, and entirely different constraints must be considered. The effect of other ingredients that provide additional benefits, like resistance to abrasion and sunlight or stabilization to UV, must also be carefully thought through.

Along with some of these technical parameters, powder coatings present unique processing challenges that require careful antimicrobial selection. High processing temperatures, UV exposure, and order of addition are integral to ensuring effective incorporation of the antimicrobial treatment without negatively impacting the coat's finish or mechanical resistance.

Looking to the future

As the industry looks to the future, the goal is to establish a broad portfolio of turnkey antimicrobial surface solutions that can be seamlessly and invisibly added to any coating. Coatings manufacturers will benefit from the development of effective tools and processes to overcome the current production challenges, enabling the inclusion of antimicrobial solutions without impacting the desired aesthetics and performance properties of the end products.

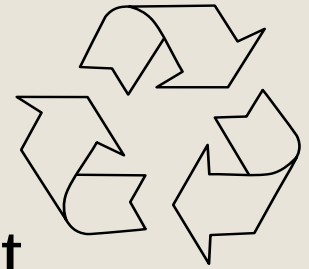
A large proportion of ongoing research into new antimicrobial treatments is focused on systems that combine different chemistries for a more diverse group of substrates, such as fabrics, metals, vinyl, and wood. Amidst the COVID-19 pandemic, these have already been introduced into silicone coatings for phone cases, trans-



parent coatings for screen protectors, glazed coatings for ceramic tiles, powder coatings for door hardware, water-based coatings for floor cleaning, solvent-based coatings for metals, and urethane coatings for a high gloss finish. It is pretty much a given that, within just a few years, inclusion of antimicrobials in coatings will be an expectation and not an optional extra.

Source: Reproduced from [Microban.com/blog](https://microban.com/blog)

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International News

Solvay's Addibond™ obtains Solar Impulse Efficient Solution Label

Solvay's Addibond™, which strengthens bonding between aluminum and adhesives in the automotive industry, is the 13th Solvay solution to receive the label. Solvay's water-soluble Addibond™ polymer, used as a thin layer to strengthen bonding between aluminum and adhesives in automotive applications, has obtained a Solar Impulse Efficient Solution Label.

Founded by the Solar Impulse Foundation, the Solar Impulse Efficient Solution Label highlights existing solutions that are both sustainable and profitable. With the addition of Addibond™, Solvay currently has 13 labeled efficient solutions which, in line with its Solvay One Planet goals, provide sustainable solutions for batteries, exhaust gas treatments, semiconductor applications, thermoset composites developed for high volume automotive applications, rare-earth-based formulations, biostimulants for farming, wastewater adsorbents, amongst others, benefiting various industries such as water, energy, and agriculture.

“Strengthening the metal-to-metal adhesive bond of aluminum parts allows automakers to reduce or eliminate the array of fasteners (nuts, bolts, screws, rivets) - a contributory factor for the light weighting of vehicles for better fuel and energy efficiency,” says Dr Marie-Pierre Labeau, metal treatment platform project leader at Solvay. “This created a need for improving the reliability of metal-to-metal bonds, for which proper surface treatments are critical.”

Solvay's Addibond™ polymers are designed to deliver a surface pre-treatment that will maximize the strength of adhesive bonds by combining two functional groups: one reacting with the metal substrate, normally before it is shaped, and the other reacting with the adhesive during assembly.

Moreover, Addibond™ helps component manufacturers and assemblers align their metal surface treatment with stricter HSE standards and regulations. The products are free of chromate, heavy metals, and fluorides, eliminating the risk of toxic exposure for operators.

For major weight reductions to be achieved, metal-to-metal adhesive bonding targets body-in-white (BIW), chassis, interior, powertrain, under-bonnet and other structural components such as electric vehicle (EV) battery casings and have already been successfully implemented in premium and mass production vehicle assemblies.

Addibond™ polymers can be an effective enabler for leveraging the light-weighting potential of aluminum and other light metals in a wider range of industries such as construction, industrial equipment, electronics, and aerospace while also meeting higher standards of sustainability in the manufacturing processes.

The innovative benefits of Addibond™ in adhesive bonding have been recognized multiple times in the industry and received the Potier Prize in France and the Chinese Automotive award in 2021 as a clean and profitable solution.

™ Addibond is a trademark of Solvay

LyondellBasell, Plastic Energy, Albéa Tubes And International Cosmetic Brand L'OCCITANE En Provence Introduce New Circular Cosmetic Packaging

LyondellBasell (NYSE: LYB), Albéa Tubes and L'OCCITANE en Provence have recently launched groundbreaking cosmetic tubes and caps for L'OCCITANE en Provence's "almond" range, supporting the circular economy. The packaging is made by Albéa Tubes with CirculenRevive polymers from LyondellBasell.

The protection of biodiversity and the reduction of waste are at the heart of the international beauty brand L'OCCITANE en Provence. Therefore, when re-designing two tubes of its "almond" product range, L'OCCITANE was seeking a resource-friendly solution and teamed up with cosmetic tubes specialist Albéa and polymer supplier LyondellBasell.



LyondellBasell and Plastic Energy

"We are excited to work with Albéa Tubes and L'OCCITANE en Provence on this project and to contribute to circular cosmetic packaging solutions", says Richard Roudeix, LyondellBasell Senior Vice President of Olefins and Polyolefins for Europe, Middle East, Africa and India. "Our CirculenRevive products, which are part of our Circulen product range of sustainable solutions, are polymers based on advanced (chemical) recycling technology from our supplier Plastic Energy who converts end-of-life plastic waste streams into pyrolysis oil feedstock."

Plastic Energy is at the forefront of the use and development of advanced recycling technology. Plastic Energy's recycled oils, branded under the name TACOIL were the source material for LyondellBasell, which was then allocated to the product for tubes and caps using a mass balance approach.

A lifecycle analysis* conducted by independent sustainability consultants concluded that plastics made from Plastic Energy's TACOIL have a lower climate change impact than virgin plastic.

"Advanced recycling can effectively process contaminated or multi-layered plastics and films that pose challenges for mechanical recycling, making it a comple-

mentary solution to help address global plastic waste," said Carlos Monreal, Founder and CEO of Plastic Energy. "Our advanced recycling process transforms these difficult to recycle plastics into TACOIL, a virgin quality feedstock meeting standards for use in food-grade, medical-grade and cosmetic packaging."

Albéa Tubes

Packaging specialist Albéa manufactured the actual cosmetic tubes and caps for L'OCCITANE en Provence. As an early signatory to the Ellen McArthur Foundation's Global Commitment, Albéa has pledged to make all its tubes recyclable by 2025, and increase the use of post-consumer recycled resins.

"The Almond Shower Scrub is the holy grail in terms of responsible packaging today. The tube and cap are designed for full recyclability and made of 93% recycled polyethylene (PE) content. On top, both are made of PE for higher-quality recycling, confirmed as recycling-ready by recycler associations in both Europe and the US. This packaging is in effect closing the loop, and that's quite a breakthrough!" adds Gilles Swyngedauw, VP of Sustainability and Innovation with Albéa Tubes.

L'OCCITANE en Provence

Regarding L'OCCITANE, the company believes consumption must evolve into regeneration. As an international beauty company, they have committed to 'cultivating change' at every level, starting with the design and production of their packaging. As part of these efforts, in 2019 L'OCCITANE signed up to the Ellen MacArthur Foundation Global Commitment for a new economy for plastic.

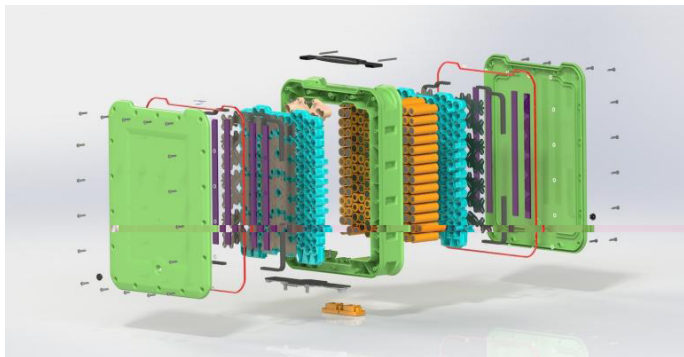
"We are accelerating our circular economy journey and are engaged to reach an overall 40% recycled content in all our plastic packaging by 2025. The use of advanced recycling technology in our plastic tubes is an exciting step forward. Collaborating with LyondellBasell and Albéa was key for success. The new tubes strictly follow ISCC Plus guidelines with a mass balance approach in order to satisfy our two clients: Customer and Nature," says David Bayard, R&D Packaging Director, L'OCCITANE en Provence.

Source: Packaging 360

Exchangeable Vehicle Battery System Housed in PP Enclosure

German battery expert Ansmann AG has joined forces with materials supplier Borealis to develop an exchangeable battery housed in a polypropylene (PP) enclosure. The hot-swappable GreenPack battery will be deployable in e-fleets for car sharing and delivery services as

well as in commercial transport. It can also be used to power lawn mowers, snow blowers, and weed trimmers. The aim of the collaboration is to design a next-generation lithium-ion battery leveraging the advantages of PP. The new generation of GreenPack battery systems will be enclosed in a PP housing and also feature PP cell holders. As opposed to engineering plastics and metals, PP features considerably lower material density and, therefore, has a weight advantage that contributes to an extended driving range for e-vehicles.



Additional advantages are the insulation properties of PP and energy savings during processing because of PP's lower melting point. In addition, CO₂ emissions associated with the polymerization of PP are generally just less than half the footprint of conventional plastic alternatives. The Borealis material also passes battery drop tests and boasts good processability.

Thilo Hack, board member responsible for R&D at Ansmann AG, commented: "In comparison to conventional materials, the new material developed by Borealis for our upcoming GreenPack generation will come without plasticizers. It will be lighter and more flexible than other typically used plastics, yet it will meet all chemical and mechanical safety criteria and will have a significantly lower CO₂ footprint. We are very pleased — we can make our GreenPack even greener supported by Borealis."

Borealis has a wealth of experience in the development of advanced and circular polyolefin solutions for the entire value chain of lithium-ion battery systems, as well as in the simulation and modeling of different components, such as cell holders or battery housings. "We are excited about this opportunity to jointly develop a novel, swappable GreenPack battery with our partner Ansmann," said Martyna Matelska-Jucha, Head of Borealis New Business Development. "This is another proof point for how Borealis re-invents products for new and technical challenging applications like mobile battery solutions for a more sustainable lifestyle. Those we can only achieve by working together as partners throughout the whole value chain."

Source: Plastics Today

BASF Taps Chinese Partner to Develop Recyclate Grades for Auto, Packaging

BASF has signed a strategic cooperation agreement with China's Zhejiang REEF Technology to develop state-of-the-art recyclate formulations for applications in the automotive, packaging, and consumer industries. Under the agreement, BASF will provide its recently launched IrgaCycle additives along with technical consultancy and support for recycled polymer formulations conducted at BASF's test facilities. REEF Technology will apply IrgaCycle additives to recycled plastics fractions heavily contaminated with paint, ink, or adhesive residue, such as automotive bumpers.



"Our goal is to help deliver higher quality, safer, and more effective products while supporting the plastic circular economy and helping reduce the use of virgin plastic material," said Hermann Althoff, Senior Vice President, Performance Chemicals Asia Pacific. "In this way, we support our customers and partners to achieve their sustainability targets and create sustainable innovations together."

"We wanted to partner with a world-class manufacturer of plastic additives like BASF to improve the quality of our recyclates," said Shirley Wu, General Manager, REEF. "With its in-depth expertise in plastic additives, BASF supports us in this core area by improving the processing and long-term stability of highly contaminated recycled plastic fractions."

IrgaCycle additive solutions help to increase the percentage of mechanically recycled content in several end-use applications such as packaging, automotive and mobility, and building and construction. These solutions address specific quality issues associated with recycled resins, such as limited processability, poor long-term thermal stability, and insufficient protection from outdoor weathering, said BASF.

Zhejiang REEF Technology Co. Ltd. is a subsidiary of Veolia Huafei Polymer Technology (Zhejiang) Co. Ltd., a joint venture company of the French Veolia Group in China. It focuses on the R&D and production of high-end engineering plastic modified materials. REEF's core products include recycled polypropylene, high-density polyethylene, ABS, and polyamide.

Source: Plastics Today

Teknor Apex Launches TPE Series with Up to 35% PCR

Teknor Apex has introduced a line of thermoplastic elastomers containing 25 to 35% recycled content to help brands achieve their sustainability goals.

The Monprene RX CP-15100 series, formulated with post-consumer recycled (PCR) content, is manufactured around the world with locally sourced raw materials procured to exacting specifications, turning local waste into a resource. Unlike competitive TPEs with recycled content, available in black only, these materials are delivered in a consistent light, natural color, similar to their prime offsets, said Teknor Apex.

Monprene RX CP-15100 is available in standard grades from 55 to 80 Shore A, and also can be tailored to specific customer requirements. The grades are designed for injection molding applications, including overmolding onto polypropylene. The materials perform and process like prime TPEs and are suited for personal care products, lawn and garden tools, writing instruments, appliances, sporting goods, and dunnage.



The Monprene RX CP-15100 Series is currently available in 55, 65, and 80 Shore A, but the hardness can be tailored to specific customer requirements.

The PCR content is sourced from waste diverted from households, or commercial, industrial, and institutional facilities. Not only does Monprene RX reduce plastic waste by incorporating it into the compound, but products made from Monprene RX remain fully recyclable at the end of the product's life.

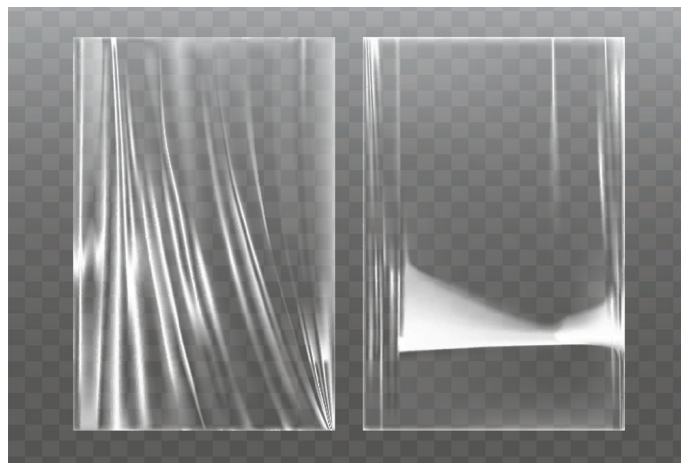
"We actively look to increase the sustainability of our products, while reducing the environmental impact of our manufacturing operations," said Teknor Apex New Business Development Manager Jonathan Plisco. "Our focus includes improving energy efficiency, reducing water consumption, and diverting waste from landfills." Monprene RX CP-15100 Series TPEs are manufactured according to ISO 9001 and ISO 14001 in the United States, Singapore, and Germany, with strict formulation control and traceability, said Teknor Apex. "This introduction represents the first of several sustainable

product launches slated for this year, including other types of recycled content, bio-based raw materials, and carbon negative additives. We are actively collaborating with various partners in the supply chain, with continued growth in our portfolio," said Plisco.

Source: Plastics Today

New testing lab allows film extruders to stretch the rules

Plastic film extrusion equipment specialist Marchante has opened MIC (Marchante Innovation Centre), in the heart of the French Alps, about an hour from Geneva and Lyon. The facility is equipped with a CastLab, seven-layer pilot cast extrusion line; and a StretchLab, a stretching simulator very close to industrial biaxial orientation processes for stretching trials. The project received support from the Auvergne Rhône Alpes Region in France, and was designed by Marchante engineers. The StretchLab is a dynamic stretching simulator. It allows visitors to deduce, from samples, industrial scale stretching parameters for films that require technical and innovative stretching configurations.



This technology allows visitors to study the stretchability of their films under processing conditions very close to industrial conditions, but with parameters that test the products further than existing films on the market, if desired.

The sample is placed at the inlet, with a minimum size of 75 mm x 75 mm. It will travel through five independently adjustable zones for heat setting, stretching, annealing or relaxing. These five independent zones are adjustable in terms of temperatures, sample speed in each zone, and air flow. Users can apply a wide variety of stretching patterns to the sample, while reproducing the angles of an industrial tenter frame, or MASIM.

Any type of film as a sample of 75 per 75 millimeters at inlet (PP, PET, PA, PE, bio-based materials, and other film structures), as well as nonwovens can be tested.

More than just a testing centre, Marchante is offering its in-house knowledge and measurement tools to help visitors commercialise new film concepts.

Innocent Marchante, the founder of the company, has been working on the development of biaxial stretching technologies since 1979, and his management team has more than 20 years of experience in this sector. The group hopes the new innovation centre will be one way to pass skills along to the next generation.

The group says it hopes that the MIC will become established as a research and development resource dedicated to future film and polymer research.

Source: Interplas Insights

Harvest Moon and Greiner Packaging create sustainable cup packaging

Germany-based organic dairy company Harvest Moon is making progress in its sustainable packaging offering by opting for cardboard-plastic combinations in which the K3 cups are made of 100 per cent r-PET produced by Greiner Packaging.



Greiner Packaging's stated aim is to keep plastic circulating in the economy for as long as possible. To this end, the packaging specialists look to work alongside customers to create new packaging solutions that can be recycled and contain recycled material. Harvest Moon, with similar ambitions, chose Greiner Packaging's plastic cups in the new cardboard-plastic solutions for its fermented yoghurt alternatives. No virgin material is used and the cups significantly cut down on carbon emissions.

Lightweight, shatterproof, and free of plasticisers, the unprinted r-PET monomaterial can be processed into 100% food-safe cups again and again as long as appropriate collection streams are used.

Cardboard-plastic combinations in packaging products have additional sustainable properties, according to Greiner Packaging. The sturdy cardboard, which can also be made from recycled material, enables thin walls and is easily separated. Since the white or transparent plastic cup is unprinted, it can be recycled very effectively. In addition, the carbon footprint of K3 cups is significantly smaller than that of alternative packaging solutions.

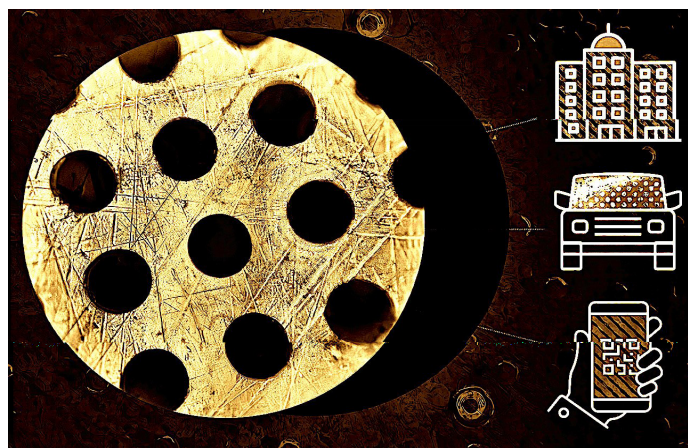
Lena Lembcke, marketing and Brand Manager at Harvest Moon, said: "We want the work we do to benefit society. We have a real taste for doing good – and for us, that includes using sustainable packaging for our yoghurt alternatives. In Greiner Packaging, we have found a partner that can fully meet our expectations in this regard."

The r-PET K3 cups from Greiner Packaging have been on supermarket shelves since January 2022.

Source: Interplas Insights

MIT researchers develop "impossible" 2D Polymer

A team of chemical engineers based at MIT have developed an innovative new polymer that was beforehand considered impossible. Led by Carbon P. Dubbs Professor Michael S. Strano, the team's creation, dubbed 2DPA-1, carries the strength of steel and yet the weight of plastic.



Using a new polymerisation method, the Stranos Research Group were able to generate a two-dimensional sheet, known as a polyaramide, that can be made in large quantities, meaning huge potential for industrial applications. The material itself can self-assemble in solution and thus the team discovered that it can be used to coat films. It is also impermeable to gases since the monomers involved can lock, or rather tessellate, together in stacks, unlike other polymers which are linked together like a chain.

Strano has already suggested that the new polymer could have potential applications in the automotive and construction industries. Speaking to SYFY Wire, Strano said: "We don't detect any molecules entering the interior of the solid. When we make a thin film of the material, we can't measure any gas permeation, so by our measurements, 2DPA-1 is the most effective barrier material of any organic polymer known."

This could enable ultra-thin coatings that can prevent water or gases from leaching. Such barrier coatings could therefore be suitable to protect metals used in vehicles, or in steel structures.

Plastics are not traditionally considered as suitable in supporting structures in the construction industry, but the unique bonding ability of 2DPA-1 monomers is opening up potential new uses that science had thus far been unable to consider.

The research is ongoing and Strano is excited by the possibilities.

Source: Interplas Insights

World Oceans Day 2022 will see launch seafood packaging from ocean bound plastics

A recent value-chain collaboration offered a glance at how the plastics industry is finding new routes to drive circularity within the industry. One partner produced a certified circular LLDPE and LDPE based on feedstock derived from ocean-bound plastics. The second turned the resin into packaging film and the third used the film to package its seafood products. The companies co-operating on the project - Sabic, Polivouga and Nueva Pescanova, respectively - together have now produced the first consumer product, a frozen food packaging solution, made using Sabic's certified circular polyolefins from recovered ocean-bound plastic.



Ocean bound plastic in this case refers to post-consumer plastic waste recovered from areas up to 50km inland from waterways that has the potential to end up in the rivers and oceans of the world. This waste forms the input for the advanced recycling process through which Sabic obtains an alternative feedstock used to produce certified circular polymers, in this case linear low and low density polyethylene. Flexible film manufacturer Polivouga processes this into flexible food-contact approved packaging films that ensure the same tear and puncture resistance as competing PE packaging structures made from virgin fossil PE resins, said Tiago Barros, CEO at Polivouga.

Then, Nueva Pescanova, a leading Spanish brand owner specialising in the fishing, farming, processing and marketing of fresh, chilled and frozen seafood products, packages its frozen seafood in bags made from this film. "With this initiative, we will prevent this plastic waste from reaching the marine environment, giving them a new life," said Ignacio González, CEO of the Nueva Pescanova Group. The new packaging will be launched to coincide with World Oceans Day 2022.

The results, commented Sami Al-Osaimi, vice president PE & Sales at Sabic demonstrate the 'art of the possible' when dedicated value chain partners collaborate with the aim of making a difference.

The ocean-bound plastic-based solution is fully certified under the Zero Plastic Oceans program and the ISCC Plus chain of custody. This means that the material flow is controlled and tracked from the ocean-bound plastic to the final packaging following a set of predefined and transparent rules.

Source: Sustainable Plastics



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India News

Tetra Pak Donates Desks Made of Recycled Beverage Cartons to City of Los Angeles School

Mumbai, March 24, 2022: City of Los Angeles School (Matunga), a school supported by Brihanmumbai Municipal Corporation, was gifted a special set of classroom furniture made entirely from recycled beverage cartons. The desks were donated as part of the 'Go Green with Tetra Pak' program that has been running in Mumbai since 2010. The donation ceremony was chaired by Mr. Kazi Irfan, Asst. Engineer, Solid Waste Management, G North Ward.

Since inception, the Go Green with Tetra Pak has collected close to ninety lakh cartons since, recycled into various products. Launched by Tetra Pak, in collaboration with RUR Greenlife, Sahakari Bhandar and Reliance Fresh this program has donated over 350 desks and one lakh other recycled products like notebooks, exam pads, garden benches and more to the community over the years.

The donation to City of Los Angeles school is one of many such donations. The used cartons were collected by individuals and institutions across Mumbai, with the highest collections coming from a variety of communities like We Work Management Pvt Ltd, Hotel Marine Plaza, Lunar Foundation, St. Andrew's Church and Mahim Group of Societies.

Supporting the initiative, Mr. Kazi Irfan, Asst. Engineer Solid Waste Management G North Ward highlighted, "I am delighted to be a part of this special event that highlights how communities can support each other. The Go Green with Tetra Pak program is a wonderful showcase of how one small act of recycling used beverage cartons can positively impact the lives of hundreds of students, while also helping save the planet. I urge all Mumbaikars to adopt waste segregation & recycling to

help reduce waste and convert it into wealth. The time to act is now."



The recycled desks not only spread awareness around the power of recycling, but also reminds these young students of the need to adopt sustainable solutions as they grow up.

Present at the event, Vinay Adhye, Business Head, Sahakari Bhandar added, "When Tetra Pak, Sahakari Bhandar & RUR Greenlife started the program in 2010 we had never imagined the overwhelming support that we would receive from Mumbaikars from all walks of life. The program has grown tremendously over the years, and we hope that we will be able to donate many more desks in the years to come."

"Tetra Pak cartons are paper-based & recyclable. So, when consumers choose carton packaging, they are already making a positive choice. And when they segregate used cartons from wet and hazardous waste, they ensure that waste pickers earn an additional livelihood, and the used cartons get recycled into many useful items like benches, desks, roofing sheets and more. All we need is for citizens to make the right choice," adds Nirjhara Rastogi, Communications Director, Tetra Pak South Asia.

Source: Packaging 360

Srichakra Becomes the First Indian Recycling Company to Receive a Positive Safety Assessment From European Food Safety Authority

Srichakra Polyplast (Srichakra), India's first food-grade quality plastic recycling company announced today that its recycled polyethylene terephthalate (rPET) has received a positive safety assessment from the European Food Safety Authority (EFSA). The announcement comes as the Food Safety and Standards Authority of India (FSSAI) is set to approve the use of rPET for food packaging, reducing the need for virgin plastics and paving the way for a circular economy for plastics in India. EFSA evaluates the safety of substances used in food contact materials (FCM) including active and intelligent materials. The verdict from EFSA is predicated on an in-depth assessment of processes, with a focus on the suitability of the finished polymer product for packaging purposes.



The use of rPET in FCM has been heavily restricted in several Asian regions including India until recently. The move by Indian authorities signals a policy shift that will enable bottle-to-bottle recycling and will help build local circular supply chains.

With the aim of reducing, reusing, and recycling plastic waste, the India Plastics Pact was launched in September 2021 to bring together businesses, governments and NGOs and accelerate the transformation of the plastic value chain. Srichakra's certification is a part of this ongoing movement, showcasing the company's commitment to turn plastic waste from a scourge into a valuable resource. Srichakra's EFSA approval comes just months after the company announced an investment of more than US\$10 million into its world-class technology to upgrade and expand recycling capabilities.

Ravindra Venkata, CEO and Co-founder of Srichakra, said, "As an organization, Srichakra is committed to offering the highest grade of recycled plastic to customers in India and international markets such as Europe and the United States. We are thrilled to receive positive EFSA's positive scientific opinion which is considered as a global benchmark. We are well on our path to be the first facility in India to offer premium food-grade rPET to domestic and global markets. Moreover, FSSAI's release of guidelines for acceptance of rPET for food applications in India is an exciting development and we are looking forward to contributing to building circular supply chains in India."

Rob Kaplan, CEO and Founder of Circulate Capital which invested in Srichakra in December 2020, commented, "This is a tremendous achievement for Srichakra that underscores its leadership in accelerating the circular economy for plastics in India. Thanks to its technology-driven approach, the company is setting new benchmarks in the recycling and waste management industry nationwide. As a strategic investor in Srichakra through the Circulate Capital Ocean Fund, we are excited to support their growth journey."

The Circulate Capital Ocean Fund (CCOF) is the world's first investment fund dedicated to scaling organizations and SMEs transforming the waste management and recycling industry across South and Southeast Asia. The Fund was created in partnership with leading global corporations, including PepsiCo, Procter & Gamble, Dow, Danone, Chanel, Unilever, The Coca-Cola Company, Chevron Phillips Chemical Company LLC and Mondelez International. Srichakra is currently in conversations with multiple global fast-moving consumer goods companies regarding offtake agreements and expects to further increase capacity across its operations.

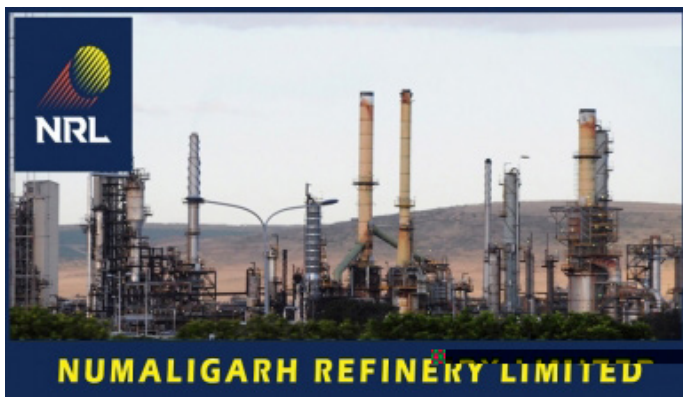
Source: Packaging 360

Numaligarh refinery to invest Rs. 6,555 crore on PP project

Oil India Limited informed the exchanges that the Board of Directors of the Company at its meeting held on March 16, 2022, has accorded its approval for Rs. 6,555 crore investment by subsidiary company Numaligarh Refinery Limited (NRL) for implementation of petrochemical project at Numaligarh, Assam.

The board also approved the formation of a joint venture company between Assam Gas Company (AGCL) and Oil India (OIL) for the three geographical areas offered by Petroleum and Natural Gas Regulatory Board (PNGRB). NRL is executing a major expansion project of capacity augmentation from present 3.0 MMTPA to 9.0 MMTPA by installing a 6 MMTPA capacity refinery and asso-

ciated crude oil terminals & pipeline considering processing of Arab Light (AL) and Arab Heavy (AH) crude oil (AL:AH=30:70). The required additional quantity of crude oil is planned to be imported through Paradip Port in Odisha. A cross country pipeline of around 1640 Km shall be laid from Paradip Port to Numaligarh for transporting 9 MMTPA of imported crude.



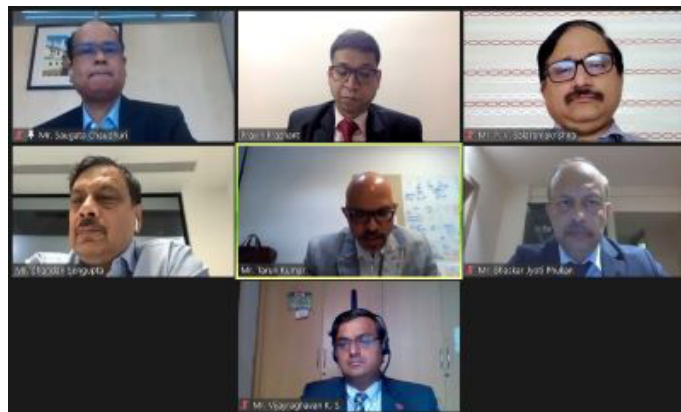
Part of the Government of India's Hydrocarbon Vision 2030 initiative to help meet growing demand of petroleum products in northeastern India, NRL's refinery expansion will increase overall crude oil processing capacity and it is scheduled to be completed by 2024. Environmental clearance was obtained for the project on 27th July 2020. Approved budget for the project is Rs. 28,026 crores.

Source: Indian Chemical News

Infrastructure and incentives can convert petrochemical opportunity into reality

Most of the petrochemicals industry experts agree that to thrive and be a part of a growing economy, reconfiguring existing refineries and new crackers are critical, infrastructure building, course correcting the strategy for PCPIRs, incentives for the local players, and better coordination between states and central government are among the few key industry expectations.

Saugata Chaudhuri, Head - Petrochemicals Marketing, HPCL is bullish about the growth of the petrochemical industry and believes that good days are around. "In Indian context, the demand for petrochemicals will be driven by factors such as growing middle class, rapid urbanization, food and water security, healthcare, and infrastructure push. The sector will continue to grow across all segments. The demographic dividends, increasing finished product exports, and rising income levels are few of the few key catalysts for this demand," says Chaudhuri who spoke at the E-conference on 'Petrochemicals: Positioning India as a Hub by 2035' organized by Indian Chemical News on March 15, 2022.



The well attended session witnessed discussion by leading industry experts and was moderated by Pravin Prashant, Editor, Indian Chemical News.

"Although the major investments in India are concentrated around C2 and C3 chains, for example Cumin Phenol, Iso-Propyl Alcohol and Acrylics, the increasing investments are being witnessed in C6 that is benzene derivatives, and also C8 that is paraxylene. In 2021, the total chemical and petrochemical industry was valued at US \$63 billion. This in itself reflects the astounding investment opportunity in the Indian petrochemical industry. The winning formula will be finding balance between the financials and sustainability," adds Chaudhuri.

"India is a fast emerging global petrochemical hub and projected to contribute to 10% of incremental global growth over the next decade. Having a per capita consumption which is comparatively far lower to the global average, a deeper penetration is quite natural. It has the potential to become one of the strongest growing segments of the economy. The end sectors such as automobiles, building, infrastructure or packaging, all are showing growth. Petrochemicals can become a driver for the oil and gas sector which is witnessing new shifts," says Tarun Kumar, GM - Petrochemical Marketing, BPCL.

"As per the CRISIL report on Indian outlook, it is expected that MS will have a growth of 2% by 2025 and which is going to throttle down to 1% by 2030. The impact is going to be slightly on the CNG for the shorter horizon but for the longer horizon, electric vehicles are going to get displaced. Diesel is slightly better but there also the growth is going to be stunted. So the Indian refinery industry is in the search of better realizations, better margins, and is looking at improved technologies, with the integrated plants becoming the key. With the current level of imports and dependence on some of the petrochemical derivatives, overall petrochemical demand and capacity expansion, placing the right portfolio. Overall it looks very promising and India has all the right ingredients to become a hub," adds Kumar.

“In the Indian context, the market is expected to grow from 42.50 million tonnes in 2021 to 49.62 million tonnes by 2025. From 2025 to 2035, India’s petrochemical capacity is expected to stand at 87.2 million tonnes at 6.9% CAGR. Among the new projects, there will be 15 world scale petrochemicals assets by 2025. In terms of policy, the government of India is promoting innovation of new technologies locally. An investment worth US \$100 billion is expected to bridge the supply deficit. The key market influencers include specialty chemicals, and plastic manufacturing. Crude oil refining capacity, growing population, improving standard of living of the masses,” Vijayraghavan elaborates.

Source: Indian Chemical News

India achieves highest ever goods export target of \$400 billion

India achieved its highest ever goods export target of \$400 billion on March 23 nine days ahead of schedule. Asia’s third largest economy had set this ambitious export target for FY22. In the April-December period the figure stood at about \$300 billion.

“India set an ambitious target of \$400 Billion of goods exports and achieves this target for the first time ever. I congratulate our farmers, weavers, MSMEs, manufacturers, exporters for this success. This is a key milestone in our Aatmanirbhar Bharat journey,” Prime Minister Narendra Modi tweeted.

In a reply during the question hour in Lok Sabha in February, Commerce and Industry Minister Piyush Goyal said, “For 10th month in a row, April 2021 to January 2022, India has posted over USD 30 billion of exports. It is a record, we have already crossed USD 334 billion of exports which is more than the highest ever that India has done in full 12 months period.. We are well on track to achieve USD 400 billion of exports.” A range of initiatives, handpicked specifically to maximise export earnings and establish dominance in key markets, have been pushed by the Commerce Department in the current fiscal year.

Source Money Control

Sanctions on Russia may result in impairment losses for ONGC, others, says Moody’s

Indian companies’ value of investments in Russia’s oil and gas fields could be impaired as import bans and international sanctions may constraint future cash flow generating capacity, Moody’s Investors Service said Thursday.

Oil and Natural Gas Corporation (ONGC), Oil India Ltd (OIL), Indian Oil Corporation (IOC) and Bharat Petro-

leum Corporation Ltd (BPCL) have invested in upstream oil and gas assets in Russia.

“Import bans and international sanctions on Russia may constrain the future cash flow generating capacity of these assets and lead to impairment losses for the companies,” the rating agency said in a note.



While multinationals like BP and Shell have announced withdrawal from Russia after its invasion of Ukraine, Indian companies have not announced an exit from their Russian investments. This, Moody’s said, will lead to a limited impairment in the value of investments immediately, especially under the current oil price environment. Indian firms have invested USD 16 billion in Russian assets such as the Sakhalin-1 oil and gas field in the far east. Moody’s said they may face hurdles in receiving dividend payments but the impact on earnings will not be significant. “If an increasing number of Russian banks are excluded from the main financial messaging SWIFT system, Indian companies might not be able to receive future dividends from their upstream investments in Russia.

“However, even in a situation where the companies cannot access these cash flows, the impact on their financial profiles will not be significant,” it said. For most companies, dividend income from the Russian investments constitutes less than 5-6 per cent of consolidated EBITDA.

The US ban on the import of Russian oil and other international sanctions on Russia may constrain the future cash flow generating capacity of these assets. Such developments would lower the value of the Indian companies’ investments and will likely result in impairment losses.

For IOC and BPCL, the Russian assets accounted for less than 5 per cent of their total asset bases as of December 31, 2021. The two firms receive earnings contributions from these assets in the form of dividends.

For ONGC, its Russian assets accounted for around 12 per cent and 20 per cent of its production volumes and proved reserves, respectively, for FY2021.

For OIL, these proportions stood at around 31 per cent and 24 per cent, respectively. For ONGC, the Russian assets contributed to around 11 per cent of its consolidated EBITDA for FY2021. Around 8 per cent of this contribution came from the Sakhalin-1 project while the balance was in the form of dividends by CJSC Van-korneft.

“Even if ONGC loses its entire earnings contribution from the Russian assets, the impact can be accommodated into ONGC’s credit profile,” Moody’s said. A similar situation for IOC and BPCL would not have any material impact on their financial profiles as dividend income from the Russian investments accounted for just around 2-4 per cent of their consolidated EBITDA for the fiscal ended March 2021 (FY2021).

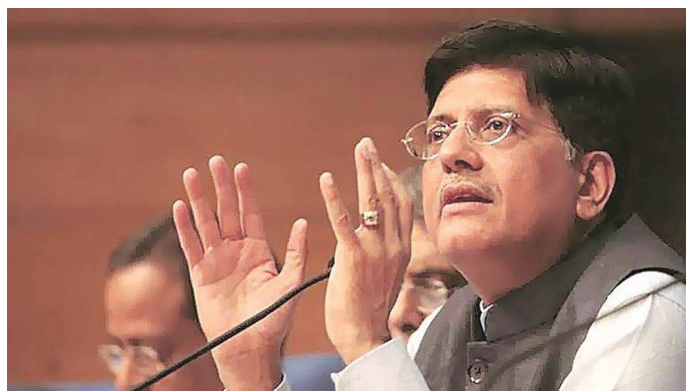
Source: FE

Govt keeping close watch on trade amid Russia-Ukraine crisis: Piyush Goyal

The government is continuously monitoring the opportunities that the Russia-Ukraine war has opened up for India and is in dialogue with traders to ensure more exports of wheat and other commodities, Commerce Minister Piyush Goyal told the Rajya Sabha on Friday.

Replying to supplementaries during Question Hour, he said Indian wheat exports are set to cross 70 lakh metric tonnes this year from merely 2 lakh metric tonnes two years ago. Goyal said many ships and containers have been blocked in several European countries following the Russia-Ukraine war and the crisis has only deepened, especially after the Covid-19 crisis.

“The government has maintained dialogue with shipping companies and those who operate containers. The government is keeping a close watch on the situation and whatever steps are required to be taken it will take action,” he told the members in the upper house.



He also said that the government is in dialogue with exporters and importers and those involved in business and various measures are being taken to ensure that payments come on time and businesses do not suffer.

“India, despite the constraints due to Covid, has achieved exports of USD 400 billion, which is historic as India has never achieved this figure,” he also said. The minister said India has been continuously monitoring the opportunities this opens up for India and Indian exporters.

To another supplementary, the minister said as regards trade is concerned, trade stands on its own legs and diplomacy and geo-politics stands on its own legs. “It is important that the two should not be mixed up, while one may have an impact on the other.” Due to our excellent relations with many countries, Goyal said, we are able to expand our trade and there is excitement and interest among many countries to have economic partnerships.

“However, our national interests and strategic interests will always be supreme over any bilateral relations that we may have with any country,” he noted.

In his written reply on the impact of the Ukraine crisis on Indian industry and commerce, Goyal said, “The impact can be assessed only after the situation stabilizes. However, the Department of Commerce is holding regular consultation with all stakeholders to ensure availability of essential imports and to find alternate destinations for our exports.”

To another supplementary on the MSME sector, the minister said it is an extremely important sector and the mainstay of the nation’s economy and directly and indirectly they continue to contribute in a very big measure to our economy and to the export that India does. In the years to come, their role is going to become increasingly more important, he quipped.

“Engineering has seen a growth of nearly 50 per cent. Auto components and some other small engineering items are actually highly job-creating and there is a major thrust on them. Technology and the adoption of new-age requirements of the world have also been our mainstay,” he said.

With mobiles being one of the biggest success stories that India has and large mobile manufacturers have set up shop in India, he said the new policy that Rs 76,000 crore is being offered as support from the Government of India to promote the semi-conductor industry to come in India is another massive initiative.

Never before has India come out with such a robust and futuristic technology-oriented policy and I am confident that India will soon become a global player in the semi-conductor industry, he noted.

Source: FE

Govt further extends deadline for feedback from MSMEs, associations, others

The MSME Ministry has further extended the deadline for feedback from MSME stakeholders on the draft national MSME policy by two weeks. According to the notification published on the MSME Development Commissioner website on Wednesday, the last date for receiving comments from all stakeholders, industry associations, MSME units, general public on the draft document has been extended to March 31, 2022. The ministry had earlier this month also extended the deadline from February end till March 15.

The draft policy was released by the government in February inviting feedback on the measures suggested to promote competitiveness among MSMEs, boost technology upgradation, cluster and infrastructure development, procurement of MSME products and provide dedicated credit support.

According to the notification, the draft policy was prepared by the academic institution Indian Institute of Public Administration (IIPA) under the Ministry of Personnel, Public Grievances and Pensions. IIPA undertakes training, research and information dissemination related to public administration.

Source: FE

India-UAE Trade Agreement to offer a big boost to the logistics sector, H E Dr Thani Bin Ahmed Al Zeyoudi inaugurates LOGIX India 2022 in Dubai

“India-UAE Comprehensive Economic Cooperation and Partnership Agreement (CEPA) shall result in accelerated trade and investment and shall open a new world of opportunities,” said H E Dr Thani Bin Ahmed Al Zeyoudi, Minister of State for Foreign Trade, UAE at the inauguration of the 3rd edition of LOGIX India in Dubai.

Dr Thani Al Zeyoudi said India is UAE’s largest Non-Oil Trade partner and the future is bright for India-UAE collaborations in Global supply chain logistics.



Thanking H E Dr Thani Al Zeyoudi for inaugurating the event, Dr A Sakthivel, President, FIEO said, “India is committed to spend US\$ 1 trillion on various infrastructure in the next 5 years which will facilitate our logistics by bringing efficiency and reducing its cost.” “Logistics is an important component of the economy and its role in manufacturing and exports can hardly be undermined. The logistics cost in India is about 14% of GDP as against the international benchmark of 8-9%. However, the focus of the Government in addressing the cost through various measures have already started yielding results. Government is implementing the dual Bharatmala (road network) and Sagarmala (waterways network) to improve logistic backbone,” added Dr A Sakthivel.

H E Ahmed Mahboob, Director General of Dubai Customs and the CEO of Ports, Customs and Free Zone Corporation said, “UAE has made significant progress in technology upgradation in customs and logistics sector and looks forward to support India in its mission for logistics sector transformation,

Complementing FIEO on organising LOGIX India in UAE, Mr Sandeep Kumar Bayyapu, Deputy Chief of Mission, Indian Embassy, UAE mentioned, “The Indian economy is on the upswing. We have become the fastest growing major economy in the world. We endeavour to become a US\$ 5 trillion economy by 2026. Indian logistics companies should form good partnerships with UAE companies and take advantage of technical expertise available in the region.

About 100 Indian companies are in UAE at the 3rd Edition of LOGIX India to meet their prospective trade partners and FIEO is playing a key role to facilitate trade and investments in the sector, highlighted Dr Ajay Sahai, Director General & CEO, FIEO. “We are excited at the prospects being offered in UAE post CEPA agreement and we look forward to exploring markets in Africa & MENA region through UAE,” added Dr Sahai.

The Inaugural ceremony was also attended by Mr Abdul Rahman bin Haider, Head of World Logistics Programme, UAE; Mr Suresh Kumar, Chairman, Indian Business & Professional Council, UAE; Ms Nadia Abdul Aziz, President, National Association of Freight Logistics, UAE and Mr Shankar Shinde, Chairman, Federation of Freight Forwarders’ Associations in India together with leading logistics companies of the region.

Source: dstnews.com

Why become a Plexconcil Member?

Established since 1955, the Plastics Export Promotion Council, PLEXCONCIL, is sponsored by the Ministry of Commerce and Industry, Department of Commerce, Government of India. PLEXCONCIL is a non-profit organization representing exporters from the Indian plastics industry and is engaged in promoting the industry exports.

The Council is focused on achieving excellence in exports by undertaking various activities and initiatives to promote the industry. The Council undertakes activities such as participation at international trade fairs, sponsoring delegations to target markets, inviting foreign business delegations to India, organising buyer-seller meets both in India and the overseas etc.,

The Council also routinely undertakes research and surveys, organizes the Annual Awards to recognize top performing exporters, monitors the development of new technology and shares the same with members, facilitates joint ventures and collaboration with foreign companies and trade associations as well as represents the issues and concerns to the relevant Government bodies.

The Council represents a wide variety of plastics products including – Plastics Raw Materials, Packaging Materials, Films, Consumer Goods, Writing Instruments, Travel ware, Plastic Sheets, Leather Cloth, Vinyl Floor Coverings, Pipes and Fittings, Water Storage Tanks, Custom made plastic Items from a range of plastic materials including Engineered Plastics, Electrical Accessories, FRP/GRP Products, Sanitary Fittings, Tarpaulins, Laminates, Fishing Lines/Fishnets, Cordage/Ropes/Twines, Laboratory Ware; Eye Ware, Surgical/Medical Disposables.

Membership Benefits

- Discounted fees at International Trade Fairs and Exhibitions
- Financial benefits to exporters, as available through Government of India
- Disseminating trade enquiries/trade leads
- Instituting Export Awards in recognition of outstanding export performance
- Assistance on export financing with various institutions and banks
- Networking opportunities within the plastics industry
- Listing in PLEXCONCIL member's directory
- Special price for Dun & Bradstreet's D-U-N-S® REGISTERED™ SOLUTION (Plus Variant)
- Basic Website Development Assistance *

*Nominal Charges Applicable

New Members

The Plastics Export Promotion Council added the following companies/firms as new members during February 2022. We would like to welcome them aboard!

| Sr. No | Name of the Company | Address | City | Pin | State | Director Name | Email |
|--------|--------------------------------------|---|------------|--------|----------------|---------------------------------|---------------------------------|
| 1 | A M Masterbatch Private Limited | Ls No 54/6 Khata No 1210 Village-Sarali Tal-Kathlal Kheda | Kheda | 387630 | Gujarat | Parth Chandulal Thakar | ceo@masterbatchwala.com |
| 2 | Artasia Polyfab Llp | Survey No. 188/P1 And 2, Near Santuro Polyfab, Latipar Road, Hirapar, | Morbi | 363650 | Gujarat | Sanjaykumar Khimabhai Daka | arta-siapolyfab@gmail.com |
| 3 | Asha Recyclean India Private Limited | Office No .203-205, 2nd Floor, Business Classic,, Chincholi Bunder Road , Malad West, | Mumbai | 400064 | Maharashtra | Rahul Podaar | info@as-harecyclean.com |
| 4 | Enviro Recyclean Private Limited | House No.1, Govind Bhavan, 1st Floor, S.V.Road, Malad West, | Mumbai | 400064 | Maharashtra | Puneet Jain | info@enviro-recyclean.com |
| 5 | Filex Systems Private Limited | 4546, I-2/16, First Floor, Ansari Road, | Daryaganj | 110002 | Delhi | Amit Gupta | amit@filexindia.com |
| 6 | Foamz Manufacturing (India) Llp | 301, Mukhyadhya Pak Bhavan, Plot No. 6/B, Road No. 24, Near Gurukrupa Hotel, Sion | Mumbai | 400022 | Maharashtra | Suhas Bhargav Masurkar | foamzmanufacturing@gmail.com |
| 7 | Gamma Plastics | 77 Netaji Subash Road | Kolkata | 700001 | West Bengal | Shivam Dhani | gammaplastics9@hmail.com |
| 8 | Gkb Ophthalmics Limited | 16-A, Tivim Industrial Estate Karaswada Bardez | Mapusa | 403526 | Goa | Pravin Asolkar | pravin.asolkar@gkbvision.com |
| 9 | Helplast Bioplastics Private Limited | Office No 5, 2nd Floor Vrindavan Complex Sr. No 52 H.No 27/2 Kothrud, Pune , Maharashtra 411038 Sr. No 52 H.No 27/2 Kothrud | Pune | 411038 | Maharashtra | Piyusha Pushkar Potnis | info@omengrs.com |
| 10 | Nichem Solutions | Ground And 2nd Floor, A223, Miraj Corporate Park, Road No.16v, Wagle Industrial Estate, | Thane | 400604 | Maharashtra | Leena Rajan Raje | lelepradnya710@gmail.com |
| 11 | Ozo Enterprises | House No. D-36, Front Portion First Floor, Vijay Vihar Rohini Ph-1 , | North West | 110085 | Delhi | Pragati Gupta | ozoenterprises2021@gmail.com |
| 12 | Shree Ghasal Bhavani Impex Company | Plot No. D- 137, Pankti, Opp. Natraj Market Street No.11 Ramnagar, Kaliyabid | | 364001 | Gujarat | Hardiben Surendrabhai Sanghavi | yashsanghvi045@gmail.com |
| 13 | Teximco Enterprise Private Limited | 1/430, Gariahat Road, Kolkata, West Bengal, 700068 | Kolkata | 700068 | West Bengal | Sanjib Nayek | sanjib@teximcoenterprise.com |
| 14 | V.K. Plastic Industries | Waraseoni Road, Garra | Balaghat | 481001 | Madhya Pradesh | Vijay Agrawal | info@powerropes.com |
| 15 | Valorous International | 1st Floor, C-19, Nandjyot Industrial Premises Co-Op Society Ltd, Safed Pool, Andheri Kurla Road, Andheri East | Mumbai | 400072 | Maharashtra | Prakash Raut | valorousinternational@gmail.com |
| 16 | Vasudev Polyplast Private Limited | Plot No. 59 Rupali Society Talaja Road | Bhavnagar | 364002 | Gujarat | Vasudevsinh Hematsinh Chudasama | vasudev-polyplast@gmail.com |