

Press Release

Flowers world-over are blooming in Flexfresh by Uflex

27 June 2018, Noida (India): Flexfresh, the special patented film that **Uflex Limited** has developed comprising a proprietary polymeric formula elongating the shelf life of flowers is serving to be a boon for Flower Companies across the globe.

Flexfresh works on the principle of Active Modified Atmospheric Packaging (AMAP) and happens to be the first ever film for packing fresh produce that is bio-degradable by composting and complies with all international regulations for overall migration (EC 1935/2004), reach compliance (EC 1907/2006) and qualifies for biodegradation under DIN EN 13432 (2000-12). The packaging can be industrially composted within 180 days.

Flexfresh works in conjunction with Fast Respiration Meter and Laser Perforation system supplied by **Perfotec B.V. of The Netherlands**. While the **respiration meter** ascertains the respiration rate of the flowers, the **laser system** uses this information to adapt the permeability of the polymeric film with the help of perforation matrix.

Waterless Internet Flower Packaging is becoming increasingly popular among global flower companies for the myriad benefits that it brings to the table.



Explaining the benefits and sustainability aspects of the award winning Waterless Internet Flower Packaging, Mr. Siva Shankaran Vice President, Flexfresh at Uflex Limited says, "The special proprietary polymeric substrate is the first biodegradable (by composting) film that maintains the hydration of flowers during transpiration (evaporation causing loss of moisture during respiration) thus creating a closed loop system. Flowers are put to slow respiration mode by reducing the oxygen availability preventing excess oxidation and dehydration. The film keeps the flowers breathing in hydrated oxygen and releases excess humidity keeping them touch dry. The flowers

thus can go without water for a significant number of days as the humidity is fed back in to them as they continue to breathe in the modified atmosphere.

This solution enables to hold flowers intact at the destination anywhere between 10-15 days as per the supply chain requirements against the normal shelf-life of 4-5 days offered by conventional packaging. This in turn enables florists and retailers to plan and store large inventory for festive rush. This development is a major shot in the arm for E-commerce companies and Retailers bringing enormous savings.

We are visualizing an instore display without water and web shops that can offer preformed flower bouquets by post parcel without having to worry about poor quality on arrival. This packaging solution completely alleviates the use of millions of gallons of water from the flower supply chain currently used thereby making it one of the most sustainable packaging solutions. Solutions entailing e-commerce packaging are proving to be as challenging today as were our first efforts around defining the sustainable packaging at the turn of this century. Just as we learned then that there is no such thing as *'the most sustainable package'*, we are learning today that there are many areas of focus that can lead to a more efficient, cost-effective and environmentally responsible e-commerce packaging solutions perfectly echoing the ethos of a brand that consumers rightly expect. While designing Waterless Internet Flower Packaging this was the axiom that we adhered to.

Internationally, all flowers are transported using expensive Air Freight from Growing Region to the Markets. The typical supply chain is Grower, Auction House, Wholesaler, Retailer/ Florist and finally the Consumer, which is now possible through offering E-Commerce platform to connect the Growers/ Brand Owners directly to the Consumers. It is now possible to ship flowers through post parcel as the package does not have any water, eliminating the possibility of cross contamination with other courier goods."

Mr. Siva Shankaran further adds, "One of the significant savings that accrues is the fact that nearly 2.7 times more material can be carried per truck, since water is completely eliminated if the transportation is done from Grower to the Retailer using Sea Freight. Similar savings are also possible while transportation is done from Auction house to Retailers. **To address the market requirements, Uflex and Perfotec offer solutions both for E-Commerce/ Retail Packaging (through flow wrap packing) and Bulk liners for sea freighting of flowers from grower to the market.**

Since the freshness of the Fresh Cut Flower is indicated by its water content, with least weight loss and lower oxidation, the flowers look much fresher and more appealing to the consumers. The overall consumer complaints have actually reduced by 90% regarding freshness of the flowers.

These benefits accrue to the consumers in terms of costs with freshest flowers having longer vase life enhancing the overall value proposition. This is where Flexfresh does the trick.

Further, the liner bags made of translucent film of special patented polymeric composition allow visibility to the brands of the florists.

Particularly noteworthy is the fact that it is also possible to bring flowers straight from Harvest to market by economic Sea freight. **This results in significant carbon footprint reduction and also enables longer storage between 30-40 days from the time of harvest.**"; expounds Mr. Siva Shankaran.

Very Recent Trial of Waterless Internet Flower Packaging by Dutch Flower Group

Recently E-Flora, the E-commerce wing of renowned Dutch Flower Group conducted a trial for Waterless Internet Flower Packaging. Sharing more details about the trial, Mr. Bas Groeneweg, Director, Perfotec B.V. says, "*In order*

to establish an independent review of what AMAP technology and Flexfresh can offer - a joint trial was carried out between E-Flora, Perfotec and Flexfresh. The trio appointed an independent third party, Flower Watch (www.flowerwatch.com) for conducting this trial. Flower Watch enjoys worldwide recognition as a leading expert in monitoring and securing the quality and vase life of fresh cut flowers.

This third party carried out the complete evaluation of the flowers with two different set-ups. One where we maintained the flowers in cold storage for seven days at 5 degrees Celsius and thereafter in water bucket at 5 degrees Celsius for two days and the Second setup entailed maintaining the flowers in cold storage for fourteen days at 5 degrees Celsius and in water bucket for two days at 5 degrees Celsius. This was done in order to establish the comparison between the different conditions in which the flowers are usually received at destination. Pink O' Hara Rose variety was particularly chosen because of the complexities like higher respiration and wilting rates that are associated with its supply chain.

Three samples of flowers were compared i.e. (a) packed in Nappy Sack; (b) packed in Flexfresh and (c) unpacked.

It was found that Flexfresh offered a guaranteed seven day vase life in both the cases i.e. after seven and fourteen days of cold storage. Whereas unpacked flowers and the ones in Nappy Sack started wilting from the second day itself. The roses packed in Flexfresh stood fresh even on the seventh day."

Expressing delight over the trials, Mr. Dave van Stijn, Director, E-Flora said, "We are delighted with the independent validation of Flexfresh and Active Modified Atmospheric Packaging (AMAP) technology for extending the shelf life of flowers. This allows us to serve our consumers better; reduces wastage and helps passing on the benefits to our customers. We are happy to associate with Perfotec B.V. and Uflex Limited."

To sum up, Mr. Siva Shankaran said, "Besides, flowers, Flexfresh as a packaging solution is getting increasingly popular globally for extending the shelf-life of various fruits and vegetables. This packaging is much sought after by the exporters from across the world for exporting their fresh produce by economic sea freight instead of exorbitant air dispatch. Plethora of sustainability benefits that come along with Flexfresh further makes the proposition eco-friendly and popular in the day and age we live."

About Uflex

Uflex is India's largest multinational flexible packaging materials and Solution Company and an emerging global player. Since its inception back in 1985, Uflex has grown from strength to strength to evolve as a truly Indian Multinational with consumers spread across the world. Uflex today has state-of-the-art packaging facilities at multiple locations in India with installed capacity of around 100,000 TPA and has packaging film manufacturing facilities in India, UAE, Mexico Egypt, Poland and USA with cumulative installed capacity in excess of 337,000 TPA.

All Uflex plants are accredited with ISO 9001, 14001, HACCP & BRC certifications. Uflex caters to markets spanning across the globe in over 140 countries like USA, Canada, South American countries, UK and other European Countries, Russia, South Africa, CIS, Asian and African nations. Integrated within its core business profile are allied businesses like Engineering, Cylinders, Holography and Chemicals which further give Uflex a superior edge above competition.

Uflex Limited is also a part of the D&B Global Database and winner of various prestigious national and international awards for its products' excellence. Uflex offers technologically superior packaging solutions for a wide variety of products such as snack foods, candy and confectionery, sugar, rice & other cereals, beverages, tea & coffee, dessert mixes, noodles, wheat flour, soaps and detergents, shampoos & conditioners, vegetable oil, spices, marinades & pastes, cheese & dairy products, frozen food, sea food, meat, anti-fog, pet food, pharmaceuticals, contraceptives, garden fertilizers and plant nutrients, motor oil and lubricants, automotive and engineering components etc.

Some of Uflex's clients on the global turf include P&G, PepsiCo; Tata Global; Mondelez, L' Oreal, Britannia, Haldiram's, Amul, Kimberly Clark, Ferro Rocher, Perfetti, GSK, Nestle, Agrotech Foods, Coca Cola, Wrigley, Johnson & Johnson among others.

For further information, please contact:

- Rajesh Agrawal; Vice President, Investor Relations, Uflex Limited
Mobile No.: 09967491495
E-mail: rajesh.agrawal@uflexltd.com
- Rohit Sharma; Senior Manager, Public Relations and CSR, Uflex Limited
Mobile No.: 09910300187
E-mail: rohit.sharma@uflexltd.com
Website: www.uflexltd.com