



HELP FRESH PRODUCE STAY FRESHER FOR LONGER



FRESH PRODUCE CAN LOSE QUALITY RAPIDLY DURING STORAGE AND TRANSPORT.

Ethylene accelerates ripening, discolouration, softening and waste throughout the supply chain.

d₂p® EA is Symphony's active packaging technology that helps remove ethylene and manage excess moisture, helping fruit and vegetables stay fresher for longer.



VERSATILE & SCALABLE

d₂p® EA is supplied as a masterbatch for incorporation into plastic packaging during manufacture and is suitable for:

- Films • Liners • Bags • Trays • Lid Films • Absorbent Pads

Compatible with:

- Extrusion • Lamination • Coating
- Injection Moulding • Rotational Moulding



THE GLOBAL OPPORTUNITY

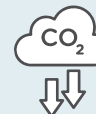
Food waste is a major global challenge.

UP TO **45%** 
of fruit and vegetables
are lost before
consumption



OVER
1.3 billion
tonnes of food
are wasted every year

Food waste
contributes
significantly to
**GREENHOUSE
GAS EMISSIONS**



By helping maintain freshness and quality throughout the supply chain, d₂p® EA can help reduce spoilage, food waste and associated environmental impacts.

KEEPING PRODUCE FRESHER. REDUCING WASTE. SUPPORTING MORE SUSTAINABLE SUPPLY CHAINS.

SCIENTIFICALLY VALIDATED PERFORMANCE



INDEPENDENT AIMPLAS VALIDATION (2026)

Independent testing by AIMPLAS demonstrated that packaging containing d₂p[®] EA reduced ethylene concentrations by **16.8% to 46.7% after 48 hours**, compared with only **0.8% to 4.0%** for conventional polyethylene films.

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COMMERCIAL BANANA TRIAL

A 14-day commercial fruit trial demonstrated:



Lower
ethylene levels



Reduced CO₂
accumulation



Higher
oxygen levels



Better colour
retention



Significantly
fewer sugar
spots



No anaerobic
off-tastes



Improved
shelf-life quality



WHY IT WORKS

d₂p[®] EA contains a highly active mineral adsorber that:

- Removes ethylene gas
- Helps manage excess moisture
- Supports a favourable O₂/CO₂ balance
- Maintains normal respiration
- Reduces anaerobic conditions
- Slows ripening and quality deterioration

VALIDATED. SCALABLE. READY FOR GLOBAL SUPPLY CHAINS.

d₂p[®] EA is a proven active packaging technology that helps maintain freshness, reduce waste, and support more sustainable produce distribution worldwide.

PRODUCT FORMAT & TECHNICAL DETAILS

Feature	Details
Masterbatch	Supplied as white, neutral-odour polymer pellets for easy incorporation into standard manufacturing processes
Addition Rate	Typically 5%, depending on application and performance requirements
Composition	Mineral-based active adsorber
Thermal Stability	Stable above 300°C processing temperatures
Product Properties	Does not alter the physical, chemical or mechanical properties of the finished product
Regulatory Compliance	Passed EU migration tests (Commission Regulation (EU) No 10/2011). In the USA, the active is compliant with 21 CFR 177.1520
Storage	Store in cool, dry conditions away from UV light
Shelf Life	12 months from supply date

Disclaimer: Symphony's products are supplied to businesses, not to consumers. Symphony does not give legal advice, and it is therefore the buyer's sole responsibility to identify and comply with all legislation which applies to the sale and use of Symphony's products, and goods made with those products, in the place where they are placed on the market, sold and/or used. It is also therefore the buyer's sole responsibility to identify and comply with all applicable legislation and codes of practice when making any statement on or in respect of such products and/or goods.

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