

# Ethylene Adsorber

For fruit and vegetable packaging



Highly active adsorbent for the removal of ethylene gas and moisture in plastic packaging to reduce spoilage of perishable fruit and vegetables.



# Ethylene Adsorber



A Masterbatch used to prevent spoilage of perishable fruit and vegetables by adsorbing ethylene gas which speeds up maturation/ripening. Extends shelf life and helps reduce decay, mould, discolouration and wilting.

## The Facts

- Ethylene is a plant hormone that increases the speed of ripening of fruit and vegetables. This can lead to products over-ripening and deterioration.
- The specific structure and high porosity of d<sub>2</sub>p<sup>®</sup>EA active will adsorb any Ethylene released by Fruit and Vegetables
- Suitable for use in all plastic processing technologies (extrusion, injection and rotational moulding, coating, lamination, woven and non-woven).
- Can be easily incorporated as an additive in the final product and does not alter physical, chemical or mechanical properties.
- Passed the migration tests for overall migration, heavy metal and the primary aromatic amine migration as per Commission Regulation (EU) No 10/2011 of 14 January 2011 and Article 3 of European Regulation No.1935/2004.
- Passed FDA migration test as per U.S. 21 CFR F.D.A Regulation part 177.1520 Clause 3.1a.

Characteristics	Masterbatch Series 96540
Applications	Fruit and Vegetable packaging applications
Colour and Odour	Neutral
Composition	Mineral-based compound
Mechanism	The active adsorber is incorporated into a plastic material via a masterbatch that will ensure fine dispersion inside the polymeric matrix
Stability	Stable up to 300°C
Storage	Should be stored in cool, dry conditions away from sources of UV light. Has a shelf life of 12 months from date of supply
Recommended Addition Rate	5%

## AIMPLAS

Independent 3rd party study proving the effectiveness of d<sub>2</sub>p<sup>®</sup>EA film by exposing the samples to a range of Ethylene concentrations (15ppm up to 150ppm). The study found that more than 80% of Ethylene gas was adsorbed in less than 24 hrs and more than 95% adsorbed within 48 hrs.

**In another experiment, the sample was exposed to an Ethylene concentration of 140ppm. 90% was adsorbed within the first 25hrs.**



Simply Fresh food bags use d<sub>2</sub>pEA technology to keep fruit and vegetables fresh and crisp for longer.

**Disclaimer:** The information provided is general information. For specific applications, please consult our Technical Department. It is the customer's responsibility to obtain regulatory approval for the intended purpose in the country or countries concerned.



Symphony Environmental Ltd  
6 Elstree Gate, Elstree Way, Borehamwood, Hertfordshire WD6 1JD, UK  
Tel: +44 (0)20 8207 5900 | Fax: +44 (0)20 8207 7632 | info@d2p.net

www.d2p.net

