

## Technical Datasheet

KEEP-IT-FRESH Masterbatch

KEEP-IT-FRESH MB



### Product Description:

KEEP-IT-FRESH Master batch can be used to produce plastic bags and containers with special properties of shelf life enhancement of fresh fruits and vegetables from 40% to 400%.

Fresh Vegetables and Fruits start to ripen after harvesting and during the ripening process, the fruits and vegetables release ethylene gas. This ethylene gas when in the package increases the ripening rate of the fresh produce hence aggravating the ripening process resulting into faster rotting of the fresh produce. The ethylene gas produced works as an auto catalyst for ripening which in turn produces higher sugar levels causing microbial spoilage of the fruits.

The plastic articles produced by using KEEP-IT-FRESH MB absorb the harmful ethylene gas produced hence slowing the ripening and rotting process and increasing the shelf life of the packed produce.

The film produces show up to 5 times increase in the shelf life of Bananas kept without packaging and improves the shelf life of Tomatoes by up to 3 times.

Tests performed on the Tomatoes show that the tomatoes kept in open started to rot in 5 days whereas the ones in the KEEP-IT-FRESH bags were good even on the 10<sup>th</sup> day compared to the ones in a generic plastic bag which

### Features

- Easily processable with Polyethylenes
- FDA Compliant (SGS Report)
- Natural Additives
- Human Safe
- Ecologically Safe
- Recyclable with the polymers

### Application

- Process at the same processing conditions recommended for the base polymer
- Compatible with LLDPE/LDPE/HDPE/HMDPE
- May cause negligible drop in transparency and gloss

### Dosage

Thickness	Mono Layer	Multi Layer
30 - 50 Micron	6%	6 % in Inner & 5 % in Middle
60 - 100 Micron	5%	5% in Inner & 4 % in Middle
110 - 250 Micron	4%	4 % in Inner & 3 % in Middle

## Testing & Certifications:

- FDA compliant with FDA 21 CFR 177.1520 Clause (a) (1) (i)

## Technical Specifications

Property	Value
Polymer	LDPE containing micronized surface modified Zeolites
Form	Pellets
Colour	Off White
Odour	Odourless
Particle Size	2-3 mm
Bulk Density	550 kg/m <sup>3</sup>
Solubility	Insoluble
MFI	1-2
Stability	Stable at PE processing conditions

## Packaging Available

25 kg bags/ 100 Kg Drum

## Safety Information

KEEP-IT-FRESH MB does not contain Lead (Pb), Mercury (Hg), Cadmium (Cd), Hexavalent Chromium (Cr6), Polybrominated biphenyls (PBB), or Polybrominated di-phenylether complying with the restricted substances listed in Article 4(1) of the RoHS Directive.

Disclaimer: This Data sheet and information it contains is considered to be accurate at the date of printing. No representation or warranty, expressed or implied is made as to the accuracy or completeness of the data and information contained in this publication. The seller does not undertake any responsibility for consequential liabilities or damages arising due to the use of the products or their performance. It is the User's obligation to evaluate and use products safely and within the scope advised in the data sheet and to comply with all applicable laws and regulations.