# TIOLITE – MASTERBATCH FOR PP FRESH KEEPING, ANTI UV, BIOCIDE



# **TECHNICAL FEATURES**

Name:	TiOLITE - PP Fresh Keeping, anti UV, biocide
Code:	ADM-TiOLITE-PP
Appearance:	Pellet
Food Contact:	YES (Ingredients approved by EFSA and FDA)
Level of dangerousness:	H400: Very toxic to aquatic organisms.
	H410: Very toxic to aquatic organisms with long lasting effects.
Usage:	SU3 – Industrial use
Restriction:	YES (see MSDS)
Date of issue:	01/01/2019
Masterbatch based on:	Polypropylene

# **Abstract:**

The masterbatch is made with a mixture composed of completely insoluble powders with zero migration. The working of the ADM-TiOLITE-PP is to make a packaging active and intelligent extending the shelf-life of the food contained in it. It includes as its primary function the removal by adsorption of the gas produced by the packaged food, moisture absorption up to 15% by weight, the protection from UV radiation, the removal of micro-bacteriological charges. This MB plays these four basic functions in food packaging, placing its primary objective in the extension of the shelf-life. It has an average particle size of its additive of 3.5  $\pm$  0.5  $\mu$ m which adapts to thinner layers such as the 30  $\mu$ m BOPP 10-80-10. It differs from all other masterbatch for an extra function: It is equipped with a photocatalyst that reduces substances composed in simple molecules, reacts with a water molecule or with the humidity of the air (H<sub>2</sub>O) generating a hydroxyl radical (OH) highly reactive. This MB plays in the food packaging six fundamental functions, setting its primary objective in the extension of the shelf-life.

# **Sectors:**

The ADM-TiOLITE-PP is recommended for the production of polymers based on polypropylene (PP and BOPP), the result is a strong protective effect with a consequent increase in the shelf life of a packaged food.

Suitable for use in the IV Gamma food packaging sector, fruits and vegetables, meats and fish, fresh pasta, sausages and fresh cheeses, packs produced in modified or controlled atmosphere.

### **Benefit:**

Increase of the shelf-life, gas adsorption, moisture absorption, high transparency of the substrate with better light transmission, protection against spectrum UVA, UVB, UVC from 100 to 380 nm, removal of micro-bacteriological charges.

### Compliance:

All ingredients in this mixture are regulated and authorized by the EFSA and the FDA. The active ingredient biocide ingredient of this mixture, is in compliance with the presentation of the biocidal product protocol, and the dossier has been duly filed.

# Dosage:

To produce the polymer: 5-6% of masterbatch.

### Order:

Minimum Order: 1 pallet of 1.125 Kg.