

## TFMA

TFMA is a hydrophobic and oleophobic dry-melt compounding additive for polypropylene. When compounded into polypropylene at a concentration of 0.25 to 1%, injection molded part surfaces display significantly reduced surface energy.



**Non-Low retention tip after dispensing  
fluid**



**Low retention 0.25% TFMA tip after dispensing  
fluid**



**Non-Low retention tip after 10 rounds of  
dispensing**



**Low retention 0.25% TFMA tip after 10  
rounds of dispensing**

## **TFMA Technical Data**

Appearance	Solid
Color	White - Tan
Odor	Odorless
Melting Point	~60 °C
Density	1.02 g/ml
Refractive Index	<1.36
Surface tension (sol gel)	~8-10 dyne/cm
Solubility Water	Nil
Solubility polyolefins	Yes
Hazardous decomposition	> 250°C
Toxicity	Non-toxic

### **Compounding guide**

TFMA is a hydrophobic dry-melt compounding additive for polypropylene. TFMA is provided as a solid that is usually ground into a fine powder by a compounder. Compounding is a process, in which a polymer resin is melted and mixed with additives such as TFMA. Melt the polypropylene and mix in TFMA at concentration of 0.25% to 1.0%. Alternatively, a master batch of 12.5% TFMA can be produced and then the 12.5% composite mixed with the melted polymer. It is very important that uniform distribution of TFMA in the polypropylene is achieved. The end mixture or composite is now ready for injection molding using instructions appropriate for the molded parts being produced. The TFMA containing composite must not be heated above 250°C. After injection molding, TFMA may take 2 to 10 days too fully bloom on the surface and provide enhanced hydrophobic properties. If quick surface presentation is needed 1% TFMA in polypropylene may be required.

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