

# INVENTIVE

## COMPOUNDING

### STRUKTOL® TR 451 for Highly Filled Compounds

Designed for extruded and molded applications, TR 451 will improve the overall processing characteristics of your compound. It is especially effective improving the incorporation of fillers into polyolefin compounds, allowing for higher loadings without sacrificing processing or properties. Compounders using treated fillers may be able to substitute untreated fillers in combination with TR 451 to cut costs and realize performance benefits.



- ➔ Lower Viscosities
- ➔ Increased Filler Loading and Dispersion
- ➔ Retained Physical Properties
- ➔ Improved Aging Characteristics
- ➔ Lower Scrap Rates Makes for Efficient Manufacturing

#### Physical Properties of 40% Calcium Carbonate Loaded PP:

	Flex Strength, MPa	Flex Modulus, MPa	Notched Impact, J/m	Unnotched Impact J/m
40% F Grade CaCO <sub>3</sub>	44.1	2190	75	640
40% FT Grade CaCO <sub>3</sub>	48.6	2800	150	No Break
40% F Grade + 1% TR 451	➔49.0	2640	➔170	No Break

#### Melt Temperature and Onset Degradation Temperature by DSC:

	T <sub>m</sub> , °C	T <sub>deg</sub> , °C
Neat Polymer	166	246
40% F Grade CaCO <sub>3</sub>	168	231
40% FT Grade CaCO <sub>3</sub>	166	237
40% F Grade + 1% TR 451	➔167	➔248



**struktol**® = INNOVATION + TECHNOLOGY + PERFORMANCE

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