

APPLICATION SHEET

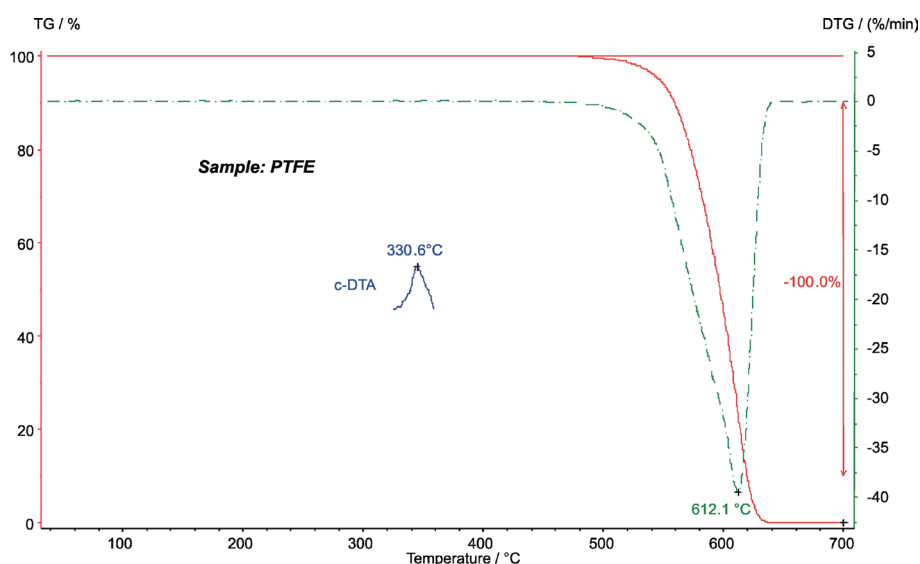
Polymers · Polymer Manufacturing
TG 209 **F3 Tarsus**[®]

Polytetrafluoroethylene

Introduction

PTFE is well-known under the brand name Teflon[®] which is used as a non-stick coating for pans. Like other fluoropolymers, PTFE features exceptionally high thermal and

thermo-oxidative stability and is completely solvent-resistant, only certain fluorinated solvents dissolving it at temperature near its melting temperature. It is also used as a high-temperature and fire-resistant electrical insulation material.



Test Conditions

Temperature range: 35 ... 700°C
Heating rate: 20 K/min
Atmosphere: Nitrogen at 20 ml/min
Sample mass: 9.67 mg
Crucible: Al₂O₃

Test Results

Degradation of PTFE occurred completely at 612°C (peak temperature of the DTG curve). A peak was detected in the calculated DTG (c-DTA[®]) curve at 330.6°C. It is due to melting of the sample.