

APPLICATION SHEET

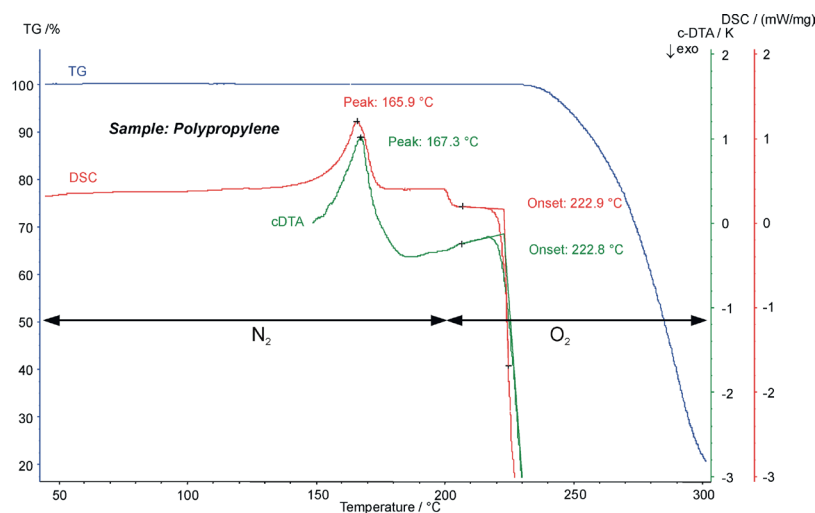
Polymers · Polymer Manufacturing
TG 209 **F3 Tarsus**®

Polypropylene

Introduction

Polypropylene (PP) is a thermoplastic polymer used in a wide variety of applications including food packaging,

textiles, laboratory equipment, automotive components, and polymer cash cards. As an additional polymer made of the monomer propylene, it is unusually resistant to many chemical solvents, bases and acids.



Test Conditions

Temperature range:	25 ... 200°C / N ₂ 200 ... 300°C / O ₂
Heating rate:	5 K/min
Atmosphere:	Nitrogen at 20 ml/min air at 20 ml/min
Sample mass (TGA):	11.93 mg
Sample mass (DSC):	12.95 mg

Test Results

The measurements were carried out with TGA and DSC systems. The DSC shows the melting peak at 166°C and the onset of degradation at 222.9°C. In the TGA run, the c-DTA® signal can be calculated during the measurement. Therefore, the OOT (Oxidation Onset Temperature) values can be measured with the DSC and also with the thermobalance. The OOT values are given by the onset of the exothermic degradation peak of the DSC or c-DTA® curve. They are comparable between the DSC test (222.9°C) and the thermogravimetric test (222.8°C).