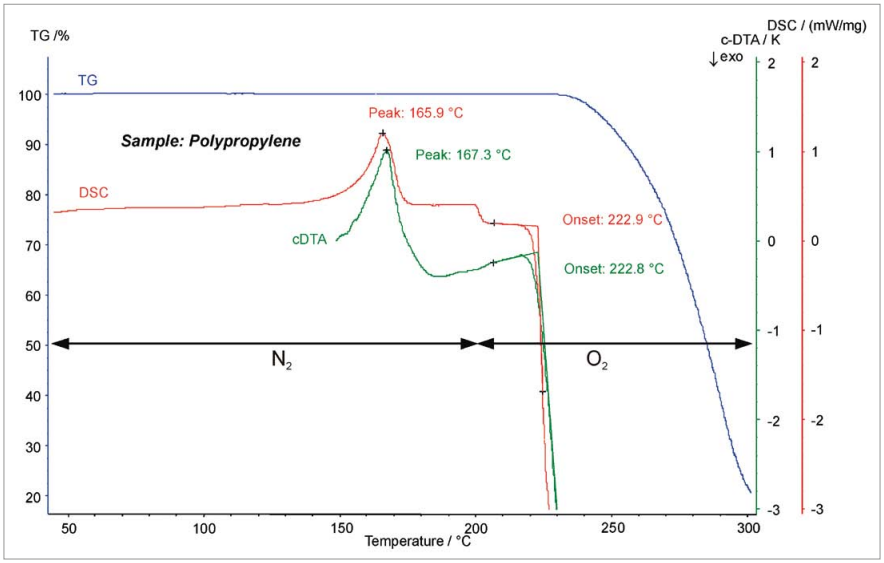
APPLICATION**SHEET**

POLYMERS – POLYMER MANUFACTURING

POLYPROPYLENE

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 from the monomer propylene, it is unusually resistant to many chemical solvents, bases and acids.



Instrument

DSC 200 ***F3*** *Maia*® / TG 209 ***F3*** *Tarsus*®

Test Conditions

Temperature range	25°C ... 200°C / N_2
	200°C ... 300°C / O_2
Heating rate	5 K/min
Atmosphere	Nitrogen at 20 ml/min
Sample mass (TG)	Air at 20 ml/min
Sample mass (DSC)	11.93 mg
	12.95 mg

Results

The measurements were carried out with the TG and DSC systems. The DSC shows the melting peak at 166°C and the onset of degradation at 22.9°C. In the TG run, the c-DTA signal can be calculated during the measurement. Therefore, the O.I.T. (Oxidation Induction Temperature) values can be measured with the DSC and also with the thermobalance. The O.I.T. 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).

NGB · AS · 034-2006 · EN · 06/13 · Technical specifications are subject to change.

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