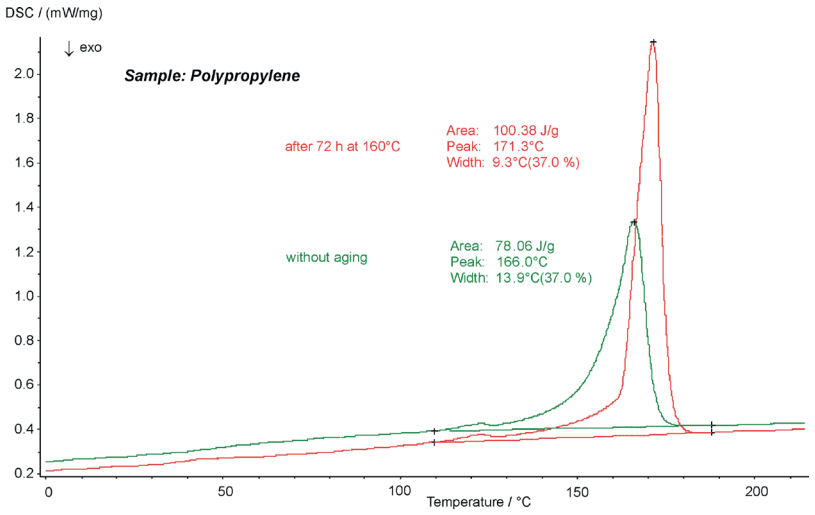
APPLICATION**SHEET**

Polymers · Polymer Manufacturing
DSC 3500 *Sirius*

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. An additional polymer made of the monomer propylene is unusually resistant to many chemical solvents, bases and acids.



Test Conditions

Temperature range:	-80 ... 220°C
Heating rate:	10 K/min
Atmosphere:	Nitrogen at 20 ml/min
Sample mass (after aging):	7.42 mg
Sample mass (without aging):	7.86 mg
Crucible:	Al, pierced lid

Test Results

During aging at 160°C, the small crystallites of polypropylene can melt and then reorganize into bigger crystallites. This results in:

- The temperature of the melting peak is shifted to higher temperatures.
- The width of the melting peak after aging is smaller than without aging.
- The peak area (heat of fusion) increased during aging.

NGB · Application Sheet 035 · E · 0621 · Technical specifications are subject to change.

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