

High Impact Modifier for Thermoplastic Resin

# MODIPER® A 4300

(2010. September)

**MODIPER® A 4300** is an innovative type graft copolymer, consisting of Et / GMA as a main-chain and acrylate copolymer as a branch polymer, which is exclusively manufactured by NOF CORPORATION utilizing NOF's developed grafting technology.

**MODIPER® A 4300** is widely used to improve the high impact property of thermoplastic resin, especially PBT, PPS around the world. NOF Corporation believes **MODIPER® A 4300** has the big possibility to solve your impact problem.

## 1 MODIPER® A 4300

Code	Composition	CAS No.
MODIPER® A 4300	E/GMA-g-mPMMA	51772-77-1

1) E/GMA : Et/GMA = 85 / 15 (wt)

REACH regulation: All monomers that compose MODIPER® A 4300 are pre-registered.

## 2 Physical Properties of MODIPER® A 4300

Code	Melt Flow Rate (g/10min.) <sup>1)</sup>	Tensile Strength (Mpa)	Elongation At Break (%)	Tensile Modulus (Mpa)
MODIPER® A 4300	0.1	14	500	29

1) 190C, 2.16kgf

## 3 Compounding and molding conditions

### 1. Compounding condition

Twin-screw extruder Temperature : 230/230/230/230/230/230/230 (°C)

### 2. Molding condition

Barrel temperature(°C)				Back pressure (MPa)	Mold temperature (°C)
C1	C2	C3	Nozzle		
235	240	240	245	160	60

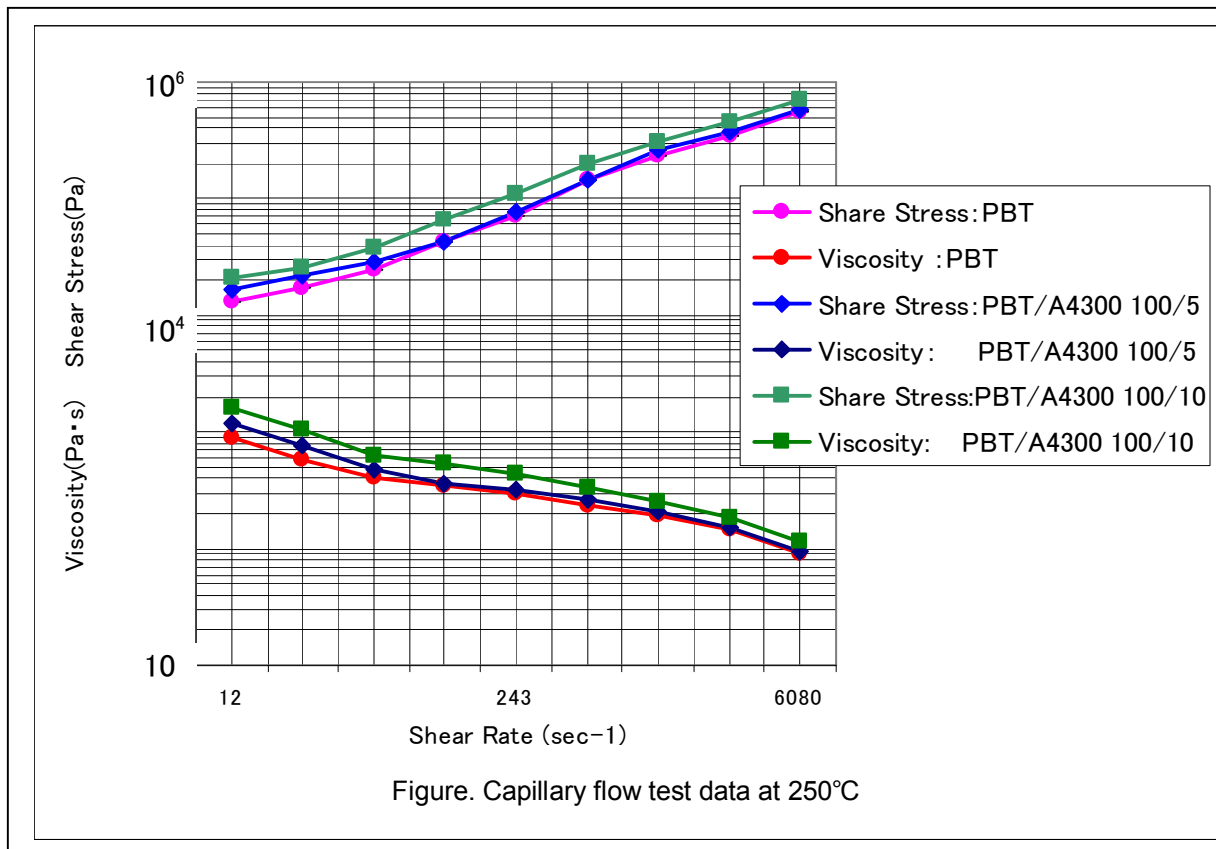
**4 Mechanical properties of PBT improved with MODIPER® A 4300**

PBT	MODIPER® A 4300	Melt Flow Rate (g/10min.) <sup>1)</sup>	Tensile Strength (Mpa)	Elongation At Break (%)	bend elastic modulus (Mpa)	Izod Impact Strength <sup>2)</sup> (kg·cm/cm) / (kJ/m <sup>2</sup> )
100	-	25	56	10	2430	2.8 / 3.5
100	5	19	49	30	2330	3.4 / 4.3
100	10	14	43	60	1720	6.2 / 7.8

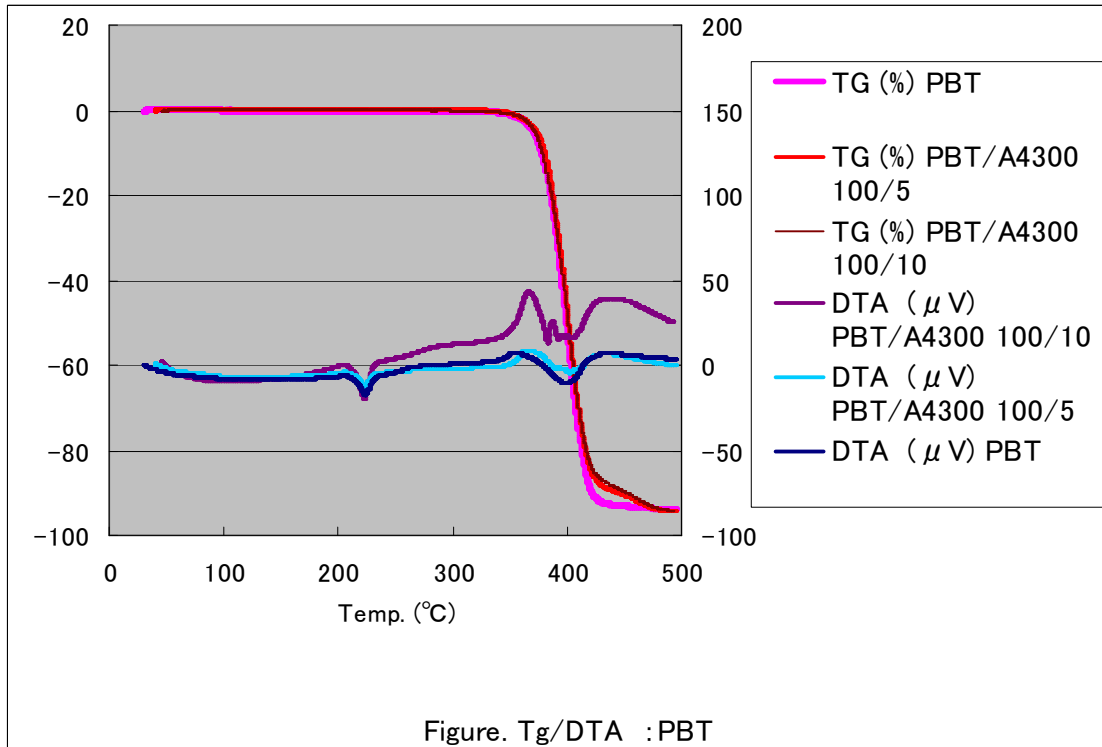
1) 250C, 2.16kgf

2) Izod Impact Strength : JIS K 7110 (Room Temperature) notched

**5 Dynamic Melt Flow Properties of PBT improved with MODIPER® A 4300**



## 6 Thermal Properties (DTA/TG) of PBT improved with MODIPER® A 4300



## 7 Package of MODIPER® A 4300

MODIPER® A 4300 is packed in 20 kg. net in moistureproof reinforced paper bag.

## 8 Storage

MODIPER® A 4300 should be stored in the original packaging at a dry and cool place (less than 30°C is recommendable) without direct sunlight.

## 9 Notice

- Although NOF's research department has compiled all figures quoted in this catalogue, NOF can not guarantee all results in independent tests.
- All precautionary labels and notices should be fully read and understood by all supervisory and employees before using.  
For additional safety and health information, contact **NOF CORPORATION**.
- **NOF CORPORATION** does not guarantee any rights on utilizing **MODIPER<sup>®</sup> A 4300**.

## 10 Sample Program

**NOF CORPORATION** would like to encourage your company to experiment with **MODIPER<sup>®</sup> A4300** exceptional properties to discover new applications which would suit your needs.

Please inquire about **MODIPER<sup>®</sup> A4300** sampling program to **NOF EUROPE (BELGIUM)** or **NOF CORPORATION** directly.

## 11 Contact

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