

# High performance MBS Impact Modifier L-200

## Resin impact modifier for pvc products

### Specifications :

|                    |              |
|--------------------|--------------|
| Price              | Contact us   |
| Place of Origin    | China        |
| Min.Order Quantity | 1            |
| Payment Terms      | T/T,L/C,D/P  |
| Delivery Detail    | 3days--7days |

### Detail Introduction :

## Transparent MBS Impact Modifier L-200

### Description

L-200 is a type of transparent MBS impact modifier. It has dual benefits with balance of mechanical properties and optical properties. It is environmentally friendly and mainly used to produce clear PVC sheet and film with balance of transparency and impact strength.

### Key property

Promote fusion

Balance of transparency and impact strength

Good heat stability

Improve melt flow ability

### Product index

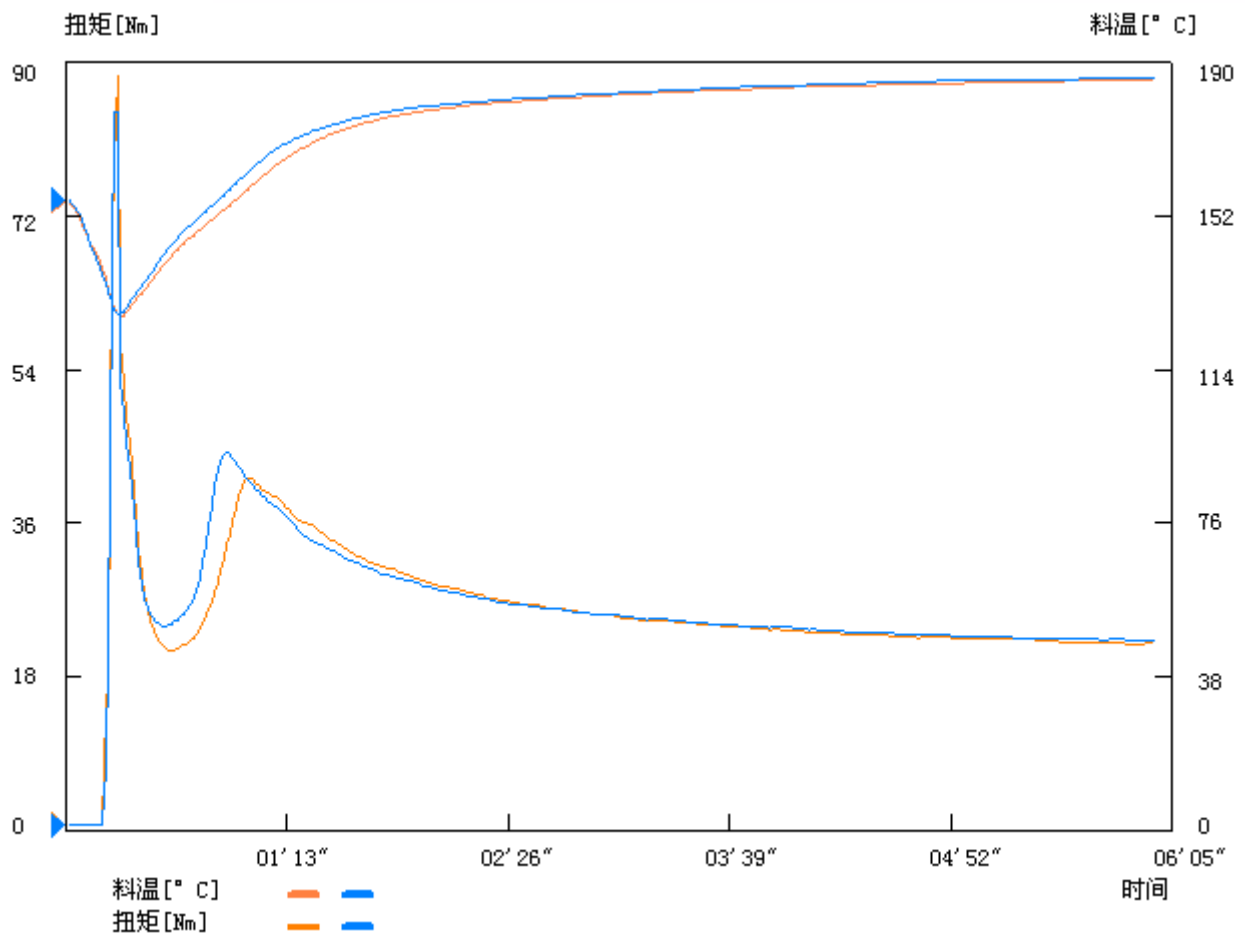
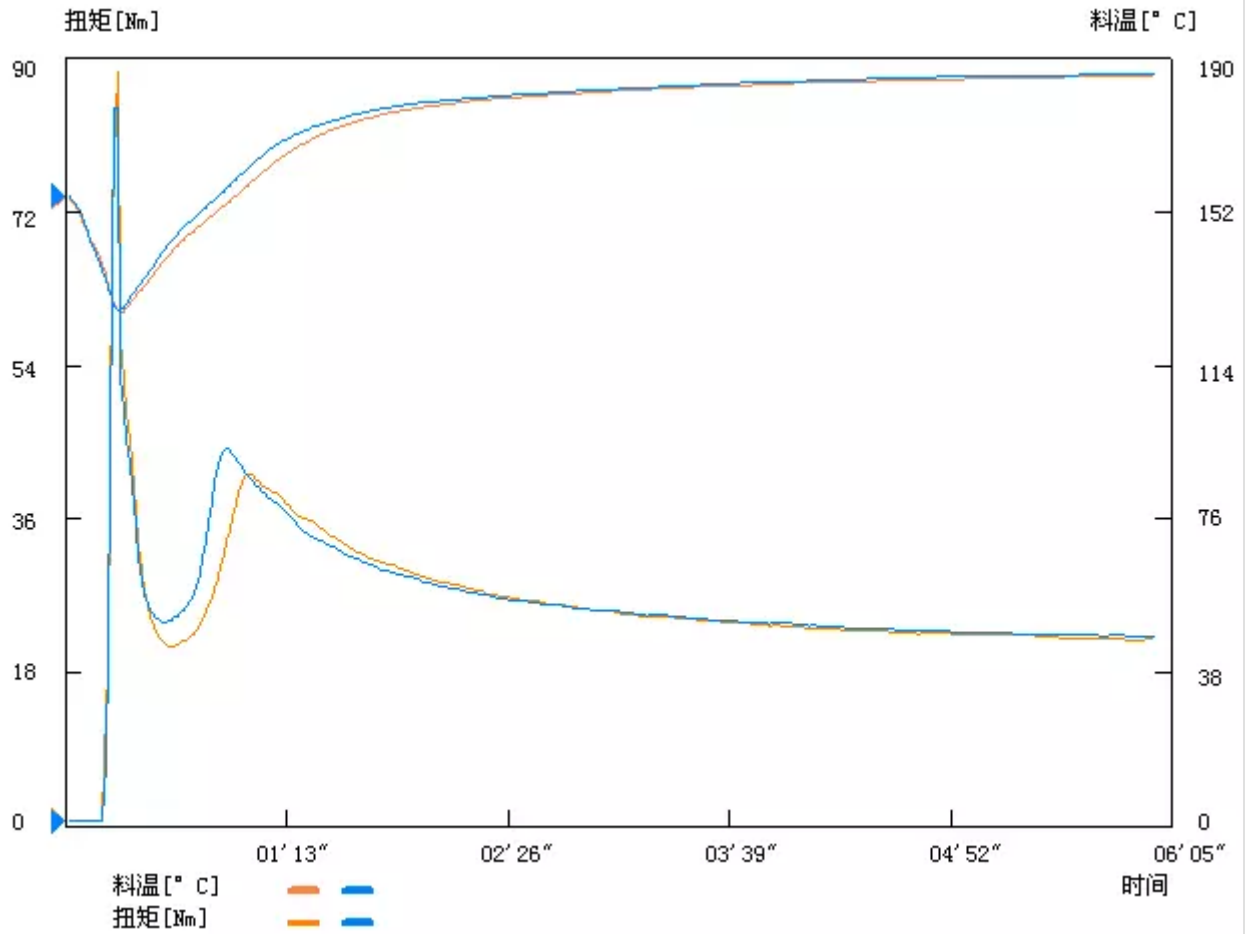
| Specification           | L-200                      |
|-------------------------|----------------------------|
| Appearance              | White, free flowing powder |
| Bulk Density            | >0.36 g/cc                 |
| Particle Size (16 mesh) | ?1.5                       |
| Volatile content        | ?1.00                      |
| Specific gravity        | ?1.10                      |

### Basic formulation for following tests

| Ingredients                     | 0# Control | 1# Competitor | 2# L-200 |
|---------------------------------|------------|---------------|----------|
| PVC(K-57)                       | 100.00     | 100.00        | 100.00   |
| Tin stabilizer                  | 1.20       | 1.20          | 1.20     |
| Transparent processing aid P-20 | 1.00       | 1.00          | 1.00     |
| Int. lubricant LU-60            | 1.00       | 1.00          | 1.00     |
| Ext. lubricant LU--74           | 0.50       | 0.50          | 0.50     |
| MBS Competitor                  | --         | 5.00          | --       |
| L-200                           | --         | --            | 5.00     |

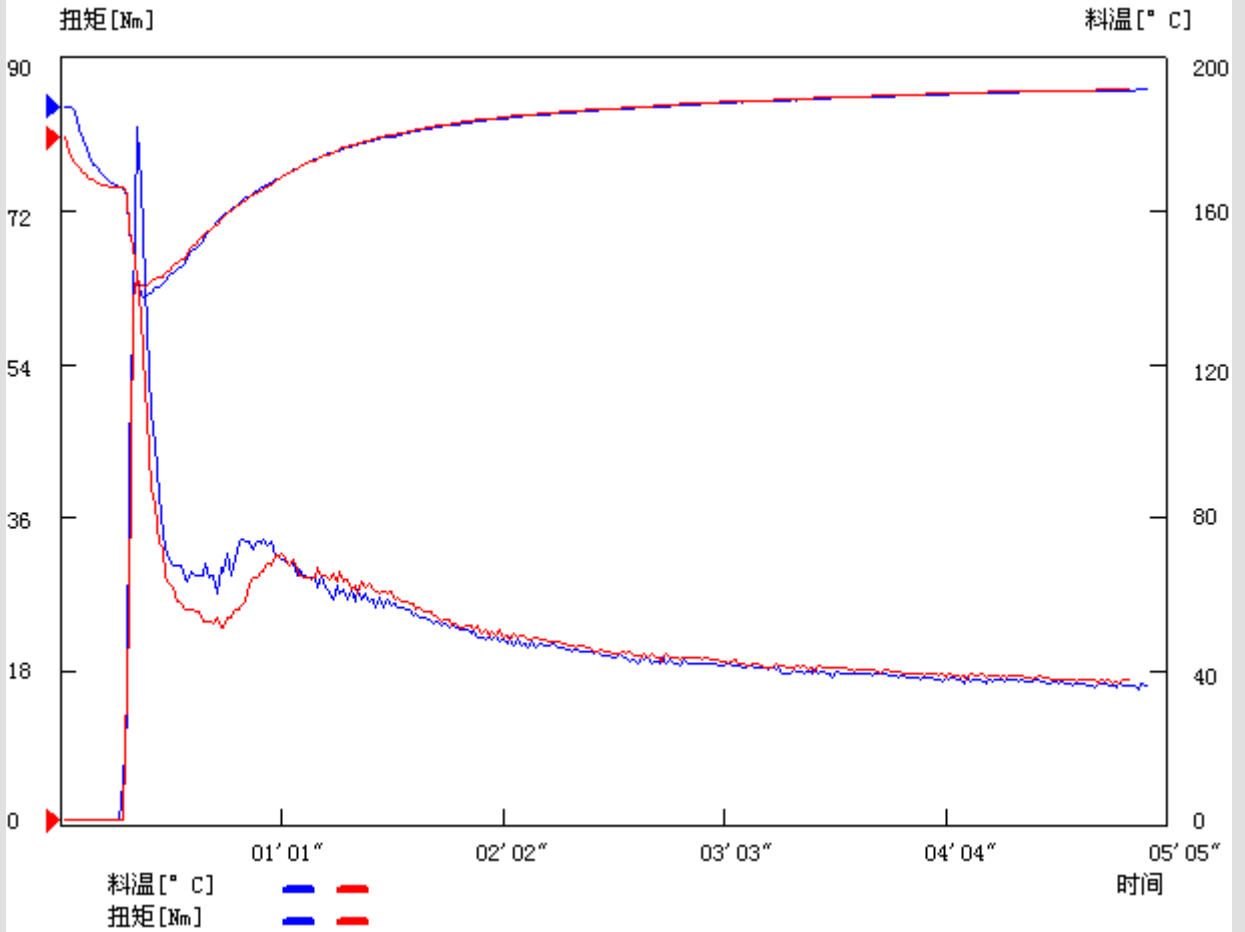
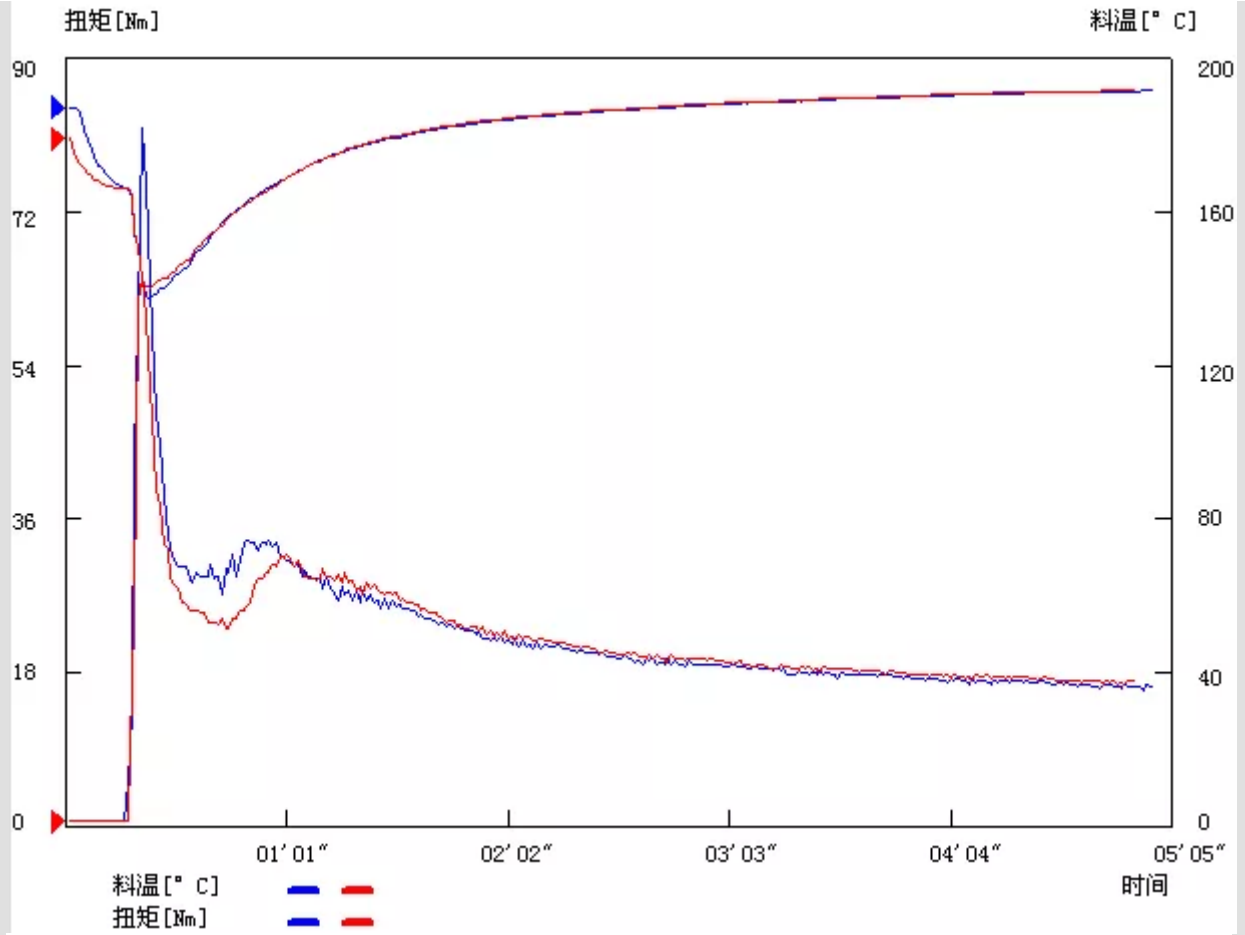
### Fusion properties comparison

|                 |            |
|-----------------|------------|
| Test conditions | 160? 60rpm |
|-----------------|------------|



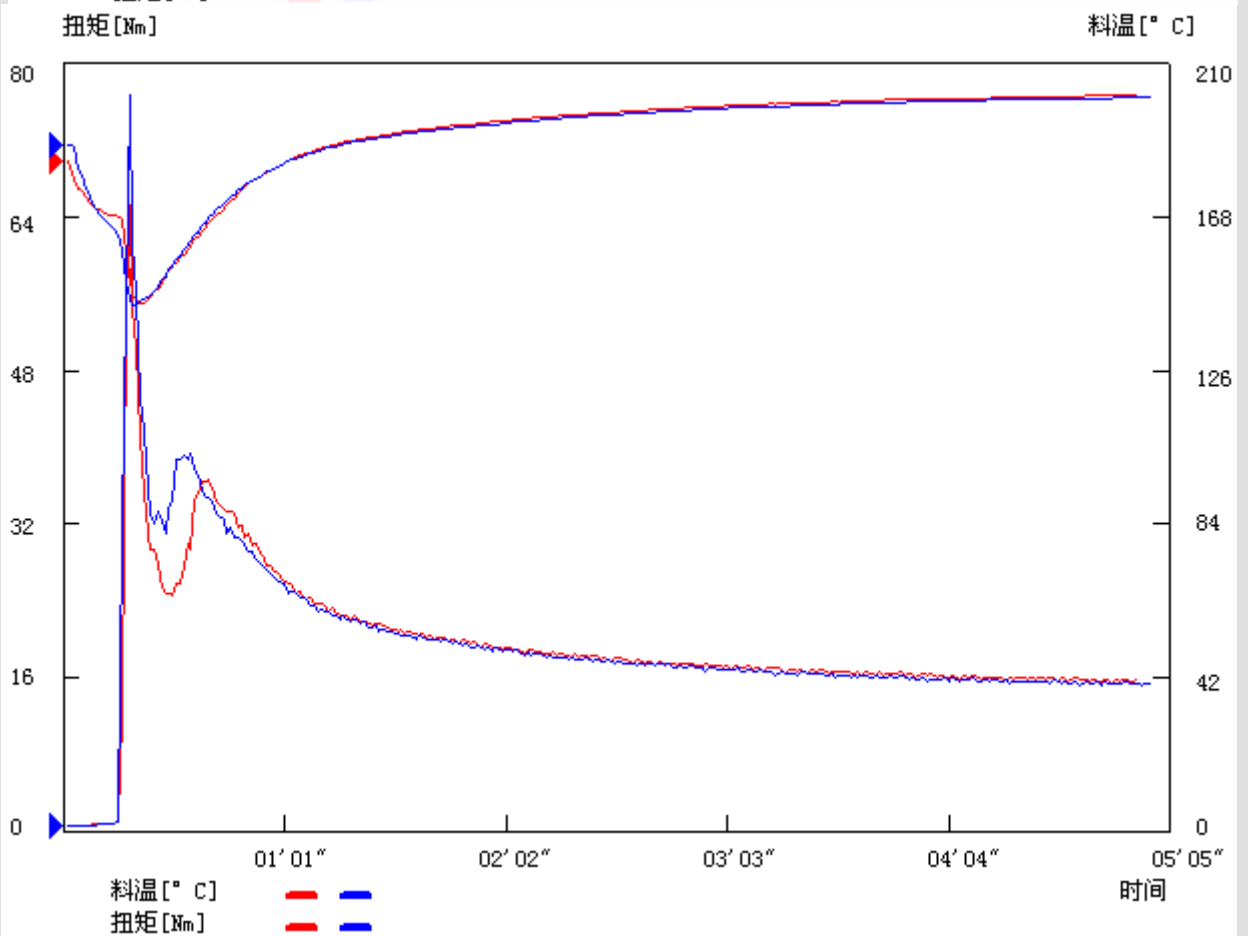
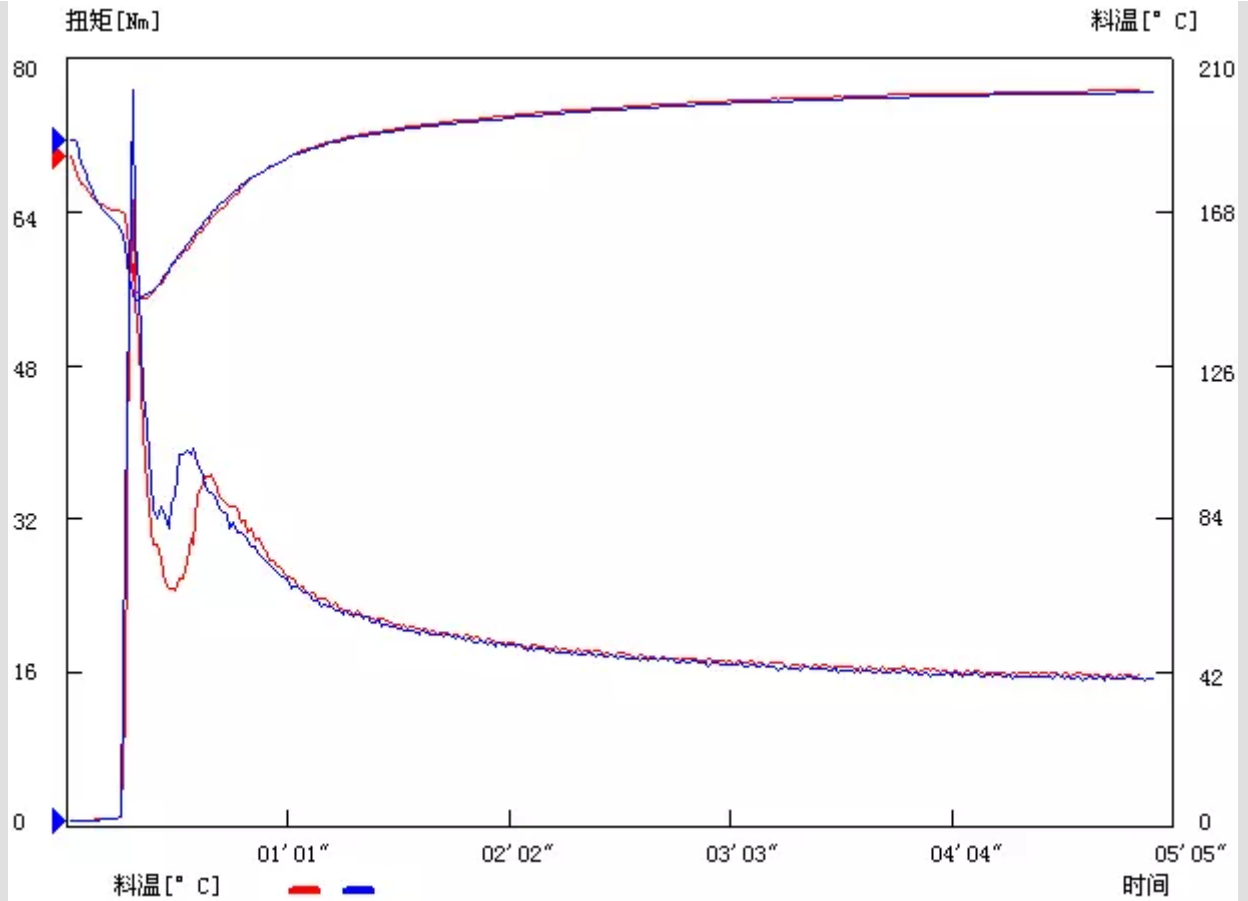
| Fusion data Type | Fusion time (S) | Highest torque (Nm) | Lowest torque (Nm) | Equilibrium torque(Nm) |
|------------------|-----------------|---------------------|--------------------|------------------------|
| 1# Competitor    | 41              | 43.3                | 20.3               | 22.3                   |
| 2#L-200          | 37              | 46.0                | 23.5               | 22.4                   |

|                        |                  |
|------------------------|------------------|
| <b>Test conditions</b> | <b>190 30rpm</b> |
|------------------------|------------------|



| Fusion data Type | Fusion time (S) | Highest torque (Nm) | Lowest torque (Nm) | Equilibrium torque(Nm) |
|------------------|-----------------|---------------------|--------------------|------------------------|
| 1# Competitor    | 41              | 30.9                | 23.7               | 16.6                   |
| 2# L-200         | 37              | 33.0                | 27.3               | 16.4                   |

|                        |                   |
|------------------------|-------------------|
| <b>Test conditions</b> | <b>190? 60rpm</b> |
|------------------------|-------------------|



| Fusion data Type | Fusion time (S) | Highest torque (Nm) | Lowest torque (Nm) | Equilibrium torque(Nm) |
|------------------|-----------------|---------------------|--------------------|------------------------|
| 1# Competitor    | 21              | 36.5                | 24.8               | 15.6                   |
| 2# L-200         | 16              | 39.2                | 31.0               | 15.6                   |

## Optical properties comparison

| Type          | Haze      |
|---------------|-----------|
| 1# Competitor | 4.02±0.04 |
| 2#L-200       | 3.85±0.03 |

## Dynamic thermal stability

Test condition: double-roller mill temperature 190? Thickness: 0.5mm

YI at different time Test standard: ASTM E313-00

| Type          | 3'   | 5'   | 7'   | 9'   | 11'  | 13'  | 15'  |
|---------------|------|------|------|------|------|------|------|
| 1# Competitor | 0.95 | 3.20 | 4.57 | 5.68 | 6.67 | 7.85 | 8.90 |
| 2# L-200      | 0.99 | 3.58 | 4.24 | 5.98 | 7.08 | 8.01 | 9.17 |

## Mechanical property

Pat impact: 5?stable 20min? 25.020HZ pat 15s

| Type          | Thickness(mm) | Number of all samples | Number of damaged samples |
|---------------|---------------|-----------------------|---------------------------|
| 0# Control    | 0.5±0.02      | 10                    | 10                        |
| 1# Competitor | 0.5±0.02      | 10                    | 2                         |
| 2# L-200      | 0.5±0.02      | 10                    | 2                         |

-5?stable 20min? 25.020HZ pat 15s

| Type          | Thickness(mm) | Number of all samples | Number of damaged samples |
|---------------|---------------|-----------------------|---------------------------|
| 0# Control    | 0.5±0.02      | 10                    | 10                        |
| 1# Competitor | 0.5±0.02      | 10                    | 4                         |
| 2# L-200      | 0.5±0.02      | 10                    | 3                         |

## Tensile strength comparison

Test standard: GBT 1040-2006 Test condition: 23? 10mm/min

| Type          | Tensile strength (MPa) | Elongation at break (%) |
|---------------|------------------------|-------------------------|
| 0# Control    | 46.71±0.24             | 115.64±4.12             |
| 1# Competitor | 45.20±0.43             | 157.04±3.54             |
| 2# L-200      | 45.24±0.46             | 164.89±4.51             |

## Metal release property comparison

Test condition: Double-roller mill temperature 196?

| Type          | Sticking time(S) |
|---------------|------------------|
| 0# Control    | 340±10           |
| 1# Competitor | 504±12           |
| 2# L-200      | 513±12           |