# RC-3690

## ASA Core-Shell Impact Modifier for PC/ASA Alloy Systems

**TECHNICAL DATA SHEET** TDS | Rev. 2026-10-02

## Product Description

RC-3690 is an ASA-type core-shell impact modifier. The source positions it for PC/ASA alloy systems where room-temperature and low-temperature impact performance are important, while maintaining weatherability and limiting adverse effects on other physical properties.

## Formulation-Specific Comparison

**Test formulation:** PC / AS / ASA High-Rubber Powder = 75 / 15 / 10 + carrier-free masterbatch 1.2%
**Reference:** Kaneka M-190

| Property | Condition | RC-3690 | M-190 |
|---|---|---|---|
| Notched Izod | ASTM D256; 23°C | 728 J/m | 750 J/m |
| Yield strength | ASTM D638; 50 mm/min | 59.6 MPa | 61.4 MPa |
| Tensile strength at break | - | 64.4 MPa | 57.3 MPa |
| Elongation at break | - | 129.9% | 111.8% |
| Flexural strength | ASTM D790; 2 mm/min | 90.6 MPa | 94.8 MPa |
| Flexural modulus | - | 2401 | 2503 |
| MFR | ASTM D1238; 220°C, 10 kg | 14.88 g/10 min | 15.29 g/10 min |
| Gloss | 20° | 95 | 95 |
| Gloss | 60° | 107 | 102 |

This is a direct formulation-specific comparison. It does not claim identical performance, chemical identity or guaranteed replacement.

## Application Positioning

| Area | Source-Supported Positioning |
|---|---|
| Primary system | PC/ASA alloy |
| Modifier type | ASA-type core-shell impact modifier |
| Performance focus | Room-temperature and low-temperature impact performance; weatherability |
| Example application direction | Outdoor and weather-resistant engineering-plastic applications |

## Color Evaluation

The source also reports color values for RC-3690 and M-190 in a PC/AS/ASA formulation with carrier-free masterbatch. These data are formulation-dependent and are available for technical comparison when needed.

## Evaluation Note

Use the comparison as a screening reference only. Final qualification should consider impact, color, flow, weathering requirements, resin grades and the customer's processing window.

## Packaging

| Item | Information |
|---|---|
| Standard packaging | 20 kg/bag |

Other commercial conditions should be confirmed in the current quotation; they are not inferred in this TDS.

## Qualification & Disclaimer

Application-test data in this document are formulation-specific. They do not constitute a universal product specification, guaranteed equivalence, or finished-part performance warranty. Customers should qualify the material in their own resin grade, formulation, processing conditions and finished-part requirements.

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