

**CYCOLOY™ FR Resin RCY6214 - Asia**

(PC+ABS)

Saudi Basic Industries Corporation (SABIC)

**Product Texts**

CYCOLOY RCY6214 resin is an injection moldable PC/ABS blend with non-brominated and non-chlorinated flame retardant. It contains 35% post consumer recycle content with a UL-94 V0 rating @ 1.5 mm. Developed for wide variety of applications that require balanced flow and impact performance. Limited availability and restricted color only.

UL Yellow Card Link [F207780-100937373](https://www.ul.com/yellow-card/F207780-100937373)

| Processing/Physical Characteristics | Value | Unit    | Test Standard |
|-------------------------------------|-------|---------|---------------|
| <b>ASTM Data</b>                    |       |         |               |
| Melt Flow Index, MFI                | 21    | g/10min | ASTM D 1238   |
| Temperature                         | 260   | °C      | -             |
| Load                                | 2.16  | kg      | -             |

| Mechanical properties                    | Value | Unit              | Test Standard |
|--|-------|-------------------|---------------|
| <b>ISO Data</b>                          |       |                   |               |
| Izod notched impact strength, +23°C, 3mm | 51    | kJ/m <sup>2</sup> | ISO 180/1A    |
| <b>ASTM Data</b>                         |       |                   |               |
| Tensile Modulus                          | 2500  | MPa               | ASTM D 638    |
| Tensile Strength at Yield                | 60    | MPa               | ASTM D 638    |
| Tensile Strength at Break                | 47    | MPa               | ASTM D 638    |
| Elongation at Yield                      | 4     | %                 | ASTM D 638    |
| Elongation at Break                      | 40    | %                 | ASTM D 638    |
| Flexural Modulus                         | 2400  | MPa               | ASTM D 790    |
| Izod Impact notched, 1/8 in              | 500   | J/m               | ASTM D 256    |

| Thermal properties                    | Value | Unit  | Test Standard   |
|---------------------------------------|-------|-------|-----------------|
| <b>ISO Data</b>                       |       |       |                 |
| Burning behav. at 1.5 mm nom. thickn. | V-0   | class | IEC 60695-11-10 |
| Thickness tested                      | 1.5   | mm    | -               |
| Burning behav. at thickness h         | V-1   | class | IEC 60695-11-10 |
| Thickness tested                      | 1.2   | mm    | -               |
| <b>ASTM Data</b>                      |       |       |                 |
| DTUL @ 264 psi                        | 85    | °C    | ASTM D 648      |
| Vicat Temperature                     | 100   | °C    | ASTM D 1525     |

| Other properties | Value | Unit              | Test Standard |
|------------------|-------|-------------------|---------------|
| Density          | 1180  | kg/m <sup>3</sup> | ASTM D 792    |

| Processing Recommendation Injection Molding | Value     | Unit | Test Standard |
|---|-----------|------|---------------|
| Pre-drying - Temperature                    | 80 - 90   | °C   | -             |
| Pre-drying - Time                           | 3 - 4     | h    | -             |
| Processing humidity                         | ≤0.04     | %    | -             |
| Melt temperature                            | 245 - 275 | °C   | -             |
| Mold temperature                            | 60 - 80   | °C   | -             |
| Zone 1                                      | 220 - 255 | °C   | -             |
| Zone 2                                      | 220 - 265 | °C   | -             |
| Zone 3                                      | 245 - 275 | °C   | -             |
| Screw speed                                 | 40 - 70   | rpm  | -             |
| Back pressure                               | 0.3 - 0.7 | MPa  | -             |

**Characteristics****Processing**

Injection Molding

**Additives**

Flame retarding agent

**Certifications**

Recycled Resin Content

**Regional Availability**

Asia Pacific

**Special Characteristics**

Flame retardant