



C2000 Performance Enhancement Series Product Guide

The CirKular+™ C2000 Performance Enhancement Series represents a family of block copolymers based on styrene and ethylene/butylene brought to market by Kraton Polymers. CirKular+™ products are multi-resin compatibilizers and performance enhancement additives for upcycling mixed post-consumer (PCR) and post-industrial (PIR) polyolefinic streams suitable for multiple end use applications.

Depending on the target performance requirements and different resins used in the formulation, typical levels of CirKular+ addition range from 3 to 10% weight. CirKular+™ C2000 Performance Enhancement Series is manufactured in North America and Taiwan and are supplied in a form of dusted pellets.

Property	Test Methods	C2000
Melt Flow, 230 °C and 5 kg (g/10min)	ASTM D 238	24
Tensile Strength* (psi)	ASTM D 412	580
Elongation at break* (%)	ASTM D 412	724
300% Modulus* (psi)	ASTM D 412	267
Hardness Shore A (10s)**	ASTM D 2240	47
Specific Gravity	ASTM D 792	0.90

* Determined on sample injection molded at 221°C

** Determined on sample compression molded at 149°C

These are typical values and should not be used to set specifications.

Versatile End Use, Processing and Functionality

Compounding and Dry Blending
Extrusion, Injection and Blow Molding
Films and Thermoforming
Multi-layer Film Structures

Recommended **Processing Conditions Guide** is available on request and should be reviewed before use.

Potential Applications

Rigid Packaging (Food or Non-food)¹
Flexible Packaging and Films
Automotive
Consumer Products
Industrial
Building and Construction

¹FDA Food Contact status provided upon request

Features & Benefits

End Product Durability and Aesthetics

- Superior mechanical properties: High impact strength at room and low temperature
- Flexibility in tailoring properties: Tailored balance between stiffness and impact
- Enhanced stress crack resistance

Increased End Product Circularity

Multi-resin compatibility across virgin plastics, bioplastics and post-consumer and post-industrial resin waste streams

- Higher post-consumer and post-industrial content
- Improved product recyclability
- Lightweighting and downgauging
- Positive environmental impact with lower CO₂ emissions and plastic waste reduction

Multi-material Design Flexibility

Multi-resin compatibility across virgin plastics, post-consumer and post-industrial resin waste streams, and wood plastics composites

- Polyolefins and polyolefinic blends: PP, HDPE, MDPE, LLDPE and LDPE, metallocenes
- Polystyrene and high impact polystyrene
- Polar resins: EVOH, PVA, EVA
- Wood plastic composites

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Kraton Corporation (NYSE:KRA) | For more information, visit our websites at www.kraton.com, www.cirkularplus.com or email info@kraton.com.

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