CICLIC

GCR

Ciclic®

Recycled & Recyclable polyolefins

Certified recycled polyolefins, backed by 20+ years of recycling expertise. Delivering up to 90% CO_2 savings with consistent quality and trusted supply.

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Bringing sustainability and performance together through advanced mechanical recycling technology

Ciclic® represents the next generation of high-performance recycled polyolefins, designed to meet the demands of industries seeking sustainable, consistent, and high-quality materials. Our commitment is clear: reducing CO^2 emissions, lowering reliance on virgin plastics, driving circularity and providing tailor-made solutions for your business.

Transforming Recycled Plastics into High-Quality Solutions

Ciclic® delivers a fully certified portfolio of recycled and recyclable polyolefins, sourced from both pre-consumer and post-consumer (PCR) materials. Our high-quality grades help transform plastic waste into sustainable, value-added solutions for a wide range of applications.

rLDPE:
- Markets: Flexible packaging, agriculture, building & construction, personal care.
- Applications: Bags, shrink film, industrial film, pouches, mulch film, cover films, irrigation pipes, secondary packaging, tubes, etc.

rLLDPE:
- Markets: Flexible packaging, agriculture, building & construction, personal care.
- Applications: HDS, secondary packaging, stretch film, tubes, wrap film, irrigation pipes, cable, etc.

rHDPE:
- Markets: Flexible packaging, rigid packaging, building & construction, personal care.
- Applications: Cover films, protective cushion films, FFS (Form-Fill-Seal), crates, netting, pipes, playground equipment, bottles, caps, etc.

rPP:
- Markets: Rigid packaging, building & construction, personal care, automotive, appliances.
- Applications: Household boxes and crates, buckets, pipes, drainage systems, geotextile sheets, parking walls, street furniture, cosmetic jars, caps & closures, bumpers, washing machine and vacuum cleaner parts, etc.

Ciclic® End Markets

- Flexible Packaging
- Rigid Packaging
- Agriculture
- Industrial
- Personal Care
- Building & Construction

Ciclic® Key Features

Customized Solutions
Tailored materials to meet unique applications requirements

Virgin Polymer Replacement
Virgin-like quality recycled content for diverse applications

Sustainable Impact
Up to **90%** CO^2 savings, aligned with the 3R approach

High-consistent quality
Reliable supply from selected recycled sources

Certified Portfolio
Meeting stringent regulatory requirements

Transform your product formulations and embrace sustainability with CICLIC®

High–Performance Mechanical Recycling at our Castellet Plant

Our Castellet plant sets new standards in mechanical recycling, combining scale, efficiency, and sustainability to deliver high-quality recycled polyolefins.

Europe's largest and most advanced plastic recycling facilities dedicated exclusively to **recycled polyolefins.**

- 15 years of experience in Compounding with Recycling.

Expanded production capacity and efficiency, ensuring a reliable and scalable supply.

- 100,000 mT/year of **post-consumer** recycled polyolefins: 20,000 mT/y Flexible & 80,000 mT/y Rigid.
- 30,000 mT/year of **pre-consumer** recycled polyolefins.

Low-energy, high-yield processing, designed to minimize environmental impact.

- Closed-loop water purification system, reducing consumption and placing us among the top 10% in water efficiency.

Stringent quality control to ensure consistency in every batch.

- Our in-house lab rigorously tests every batch with analytical methods and real-world simulations to guarantee top performance and quality.

Why choosing Ciclic®?

One of Europe's largest polyolefin recyclers
20+ years of recycling expertise with compounding capabilities

Agile go–to–market developments

Large–scale production
- 100,000 mT/y post–consumer
- 30,000 mT/y pre–consumer polyolefins

Reliable Strategic Sourcing & Consistent Supply

Certified sustainable portfolio

Innovation Hub
- Industrial Scale Pilot Plant
- 50+ specialists
- Advanced Lab technology
- Co-creation process

Certifications
Commitment to the highest standards

TÜVRheinland CERTIFIED — Management System ISO 9001:2015 ISO 14001:2015 — www.certipedia.com 9105057179

TÜVRheinland CERTIFIED — Product Carbon Footprint PAS 2050:2011 — www.certipedia.com 9105057179

TÜVRheinland CERTIFIED — Product Carbon Footprint Regular Surveillance — www.certipedia.com 9105057179

ISCC International Sustainability & Carbon Certification

AENOR TRAZABILIDAD DE PLÁSTICO RECICLADO UNE-EN 15343

RecyClass RECYCLING PROCESS EN 15343

Operation Clean Sweep® AENOR Certified

High–Performance Mechanical Recycling Process

Consumption

Manufacturing

CICLIC Recycled Polyolefins

8. Delivery – Custom Solutions for Brand Owners and Value Chain

We deliver reliable recycled polyolefins through controlled sourcing, high-performance formulations, and consistent quality–tailored to the needs of brand owners and the value chain worldwide.

Products

Recycled Material PCR & PIR

1. Collection and Sorting:

The process starts with the careful sourcing and sorting of pre- and post-consumer polyolefins by material type, color, and quality. Full traceability is maintained as materials are prepared for processing.

High-quality Pre-sorted Material

Material shredded into small flakes

2. Particle Size Reduction

High-capacity shredders reduce the material to a consistent particle size, maximizing productivity and ensuring uniform feedstock for the next stages.

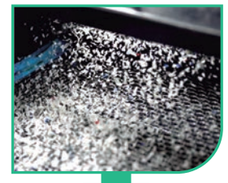
Cold and hot water washing

3. High Efficiency Washing

The material undergoes a thorough hot water and caustic soda wash to remove contaminants. Controlled dosages guarantee material quality at this stage.

Our hot washing capacity exceeds 75,000 metric tons annually, making us one of the largest in Europe.

Drying process



Sorting by color & material composition

4. Sorting by color & material composition (Tomra Technology)

Advanced optical sorters separate flakes by polymer type and color. This ensures high-purity streams, optimizing recyclability and performance for demanding applications.

Fed into processing line

5. Extrusion (Erema Technology):

Sorted flakes are processed through our EREMA extrusion lines, where they are melted, filtered, and compounded. Our technical expertise ensures formulations are tailored to meet material performance and processability needs.

Pelletizing

Deodorization Treatment Batch Homogenization

6. Deodorization Treatment & Batch Homogenization

Post-consumer materials undergo specialized deodorization treatments to remove unwanted odors, meeting brand owner expectations for aesthetics.

Batch homogenization guarantees color consistency and uniform properties across every production run.

Laboratory testing

7. Quality Control & Testing

Our in-house lab conducts rigorous testing–both analytical and application-based–to ensure each batch meets the highest standards of quality and performance.

Contact
Let’s get touch

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CICLIC® has the potential to reduce CO^2 emissions by up to 90% in your product formulations. Actual emission reductions may vary based on the final application, product formulation, and specific usage conditions. All statements, information, and data presented here in by GCR PLASTIC SOLUTIONS GROUP S.L.U. (GCR Group hereinafter) are believed to be accurate but are for guidance only and are not to be taken as a guarantee or other representation for which GCR Group and its affiliates and subsidiaries assume legal responsibility. GCR Group expressly disclaims any and all warranties, either express or implied, including, without limitation, any warranties of merchantability or fitness for a particular purpose, arising out of any use of the products or services. Identified herein or reliance on any information provided herein. All statements, information, recommendations and products must be thoroughly evaluated and verified by the end user to determine their applicability or suitability for each particular use, assuming all responsibility. Typical values are indicative only and are not to be construed as being binding specifications.

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Innovating
our sustainable
tomorrow

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