FROM PLASTIC TO POWDER

Plastic waste transformed

POWDURA® ECO

POWDER COATINGS

SHERWIN-WILLIAMS®

industrial.sherwin.eu

MITIGATING PLASTIC POLLUTION

WE'RE IN IT TOGETHER

Plastic is an ever-present material in both our personal and professional lives – it's hard to imagine a world without it. From our pantries to our safety helmets, plastic has become an essential material, but its production is a growing global concern due to **plastic pollution**.

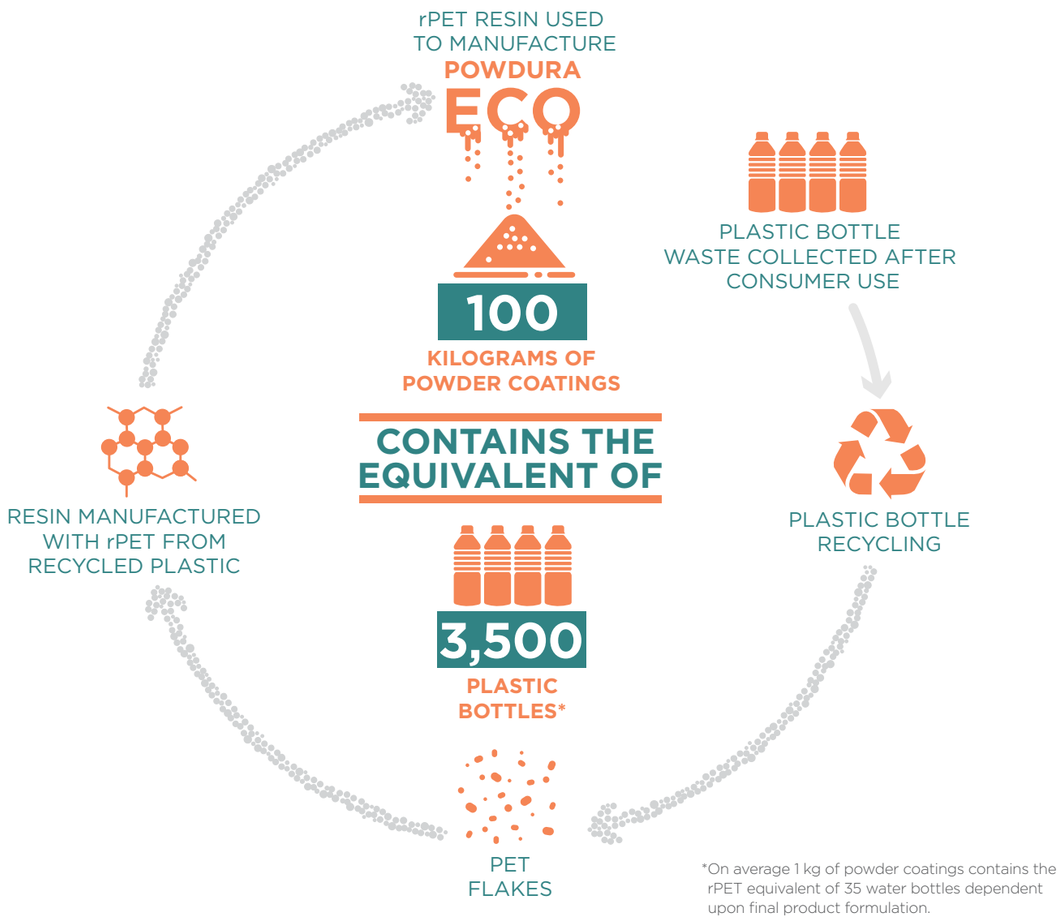
The market is beginning to demand social and environmental responsibility from all industries. Increasingly, manufacturers – whether they make appliances, furniture, building products or paint – are being held to higher sustainability standards, and it's our collective responsibility to contribute solutions to plastic pollution. Initiatives to reuse materials, reduce energy consumption and decrease waste have become common goals among our organizations because consumers expect their favorite products to be environmentally conscious.

Choosing powder over liquid or solvent-based coatings might reduce your environmental impact. Powder coatings contain little to no VOCs. Up to 95 % of overspray can be reclaimed and reused. They often require just one coat and can cure at lower temperatures, providing material and energy savings.

Powdura ECO powder coatings from Sherwin-Williams are a next-level approach to sustainability. This transformative product collection elevates powder coating sustainability to new heights – providing customers a more eco-conscious solution to product protection, color and performance.

PUTTING WASTE TO WORK

The innovation behind Powdura ECO powder coatings is extraordinary. Plastic waste converts into a durable, high-performing polyester resin that contains up to 25 % post-consumer recycled plastic (rPET). Each kg of Powdura ECO coatings contains the equivalent of 35 recycled plastic bottles and delivers the same performance as conventional polyester powder coatings.



*On average 1 kg of powder coatings contains the rPET equivalent of 35 water bottles dependent upon final product formulation.

Suitable for use in interior and exterior environments, Powdura ECO coatings meet or exceed your existing powder coating performance standards, and provide increased flexibility and impact resistance. They deliver an exceptional balance of mechanical properties, excellent color retention and solvent resistance. These polyester-based coatings are customizable to meet your requirements and can align with third-party certifications like LEED, GREENGUARD® and BIFMA Level®.

Available in a wide range of special effects, and color and gloss options, Powdura ECO products are easy to apply, have wide cure capability, and offer great light and weather fastness.

rPET FAQs

Q: What is PET?

A: PET (polyethylene terephthalate) is a form of polyester and the most widely recycled plastic in the world. It is characteristically known for its strength, transparency and thermostability, which makes it a popular choice for packaging.

Q: What is the difference between pre-consumer (post-industrial) and post-consumer material?

A: Pre-consumer recycled content is composed of the materials that can be recycled during the product manufacturing process. Post-consumer materials are recycled after they have been purchased by a consumer and used.

Q: Recycled products can carry the perception of inferior performance – what can I expect with the Powdura ECO range of products as compared to their non-recycled counterparts?

A: Powdura ECO products have the same quality, performance, durability and reliability as their “original” counterparts.

POWDURA ECO APPLICATIONS

Powdura ECO is suitable for almost any application. Examples include lawn equipment, transportation vehicles, consumer goods, electrical enclosures and fixtures.

PROVEN PERFORMANCE

Powdura ECO powder coatings are virtually the same in application, coating properties and performance when compared to conventional powder coatings. For specific performance properties, please see the chart below.

TEST PROPERTY	TEST METHOD	HYBRID	POLYESTER
60° Gloss	ISO 2813	5 – 99 units	50 – 99 units
Impact	ISO 6272-1	>200 kgcm	>200 kgcm
Mandrel Bend	ISO 1519	10mm no cracking	10mm no cracking
Pencil Hardness	ISO 15184	≥2H	≥2H
Crosshatch Adhesion	ISO 2409	Class 0	Class 0
Re-coat Adhesion	ISO 2409	Class 0	Class 0
Humidity Resistance	ISO 6270-2	Blister Rating: max 2 (s2)	Blister Rating: max 2 (s2)
Corrosion Resistance (1000 hours)	ISO 9227	Avg. creep from scribe: <1 mm	Avg. creep from scribe: <1 mm
Weathering Resistance	ISO 16474-2	N/A	60° Gloss Retention: >50%
Cure Cycle		10 minutes @ 200 °C 20 minutes @ 180 °C	10 minutes @ 180 °C 20 minutes @ 160 °C

Measurements based on laboratory conditions on zinc phosphate steel panels coated between 50 and 80 µm.

EMPOWER YOUR CONSUMERS

Consumers want to feel good about the purchases they make and often consider sustainability before the transaction stage. By using Powdura ECO, you can differentiate your finished goods with recycled materials that don't skimp on performance – a sentiment both you and your consumers can celebrate.

OUR COMMITMENT TO SUSTAINABILITY

Sherwin-Williams focuses on bringing sustainable coating solutions to market and we are committed to leading the development of sustainable processes that help to preserve natural resources. Whether we're assessing programs focused on employee safety or ways that we can effectively conserve resources, protecting the world we live in is a core value that has been with us since 1866.

TAKE THE NEXT STEP TO REDUCING YOUR ENVIRONMENTAL FOOTPRINT

Contact your local Sherwin-Williams Sales Representative to learn more about Powdura ECO and to discover your new competitive edge.

To explore the color, gloss and texture possibilities of Powdura ECO, order new Powdura ECO color samples at industrial.sherwin.eu.

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At Sherwin-Williams, we think about coatings differently, continuously seeking the most sustainable solution to help your products win over your customers. Whether you need the most rugged and protective coating, a technical expert to provide answers and hands-on support, consistently perfect color at just the right gloss, or a custom solution created just for you — we are here to help. We are Sherwin-Williams General Industrial Coatings, and we are obsessed with giving you the competitive edge.

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