



PET BOTTLE
FLAKES



CATALOGUE **2024**

ABOUT RUDRA ECOVATION



Established in 1997, Rudra Ecovation (Formerly Shiva Tex Fab) has consistently demonstrated unwavering commitment to sustainability, positioning itself as a trail-blazer in PET waste recycling. Based in Ludhiana, Punjab, our sprawling 100-acre state-of-the-art facility proudly stands as Asia's preeminent integrated manufacturing unit for rPET waste recycling. Over our illustrious 26-year journey, we have not only achieved the impressive feat of reducing global CO2 emissions by more than 1,40,000 metric tonnes annually, but have also become synonymous with cutting-edge environmental solutions.

Operating at the nexus of technology and eco-consciousness, our facility employs a meticulous application of material sciences to process a staggering 350 metric tonnes of PET wastes daily. This results in the transformation of plastic bottles into a versatile array of soft, breathable, and skin-friendly end product named Anaura, seamlessly integrating sustainability into every fibre.

Our business model enables sustainability as well as support circular economy by manufacturing high quality mass usage innovative sustainable products like Anaura to intricate carpets, technical textiles, filament yarn, spun yarn, fibre, acoustic panels and beyond. The backbone of our operations lies in the precision and sophistication of our machinery, sourced from renowned manufacturers in Switzerland (Rieter), Italy (Savio), and Germany (Schaeffler). our initiatives consistently align with the gold standard of ESG (Environment, Social, & Governance) Principles.



PRODUCT OFFERINGS

Rudra Ecovation plays a crucial role in clearing and recycling substantial volumes of plastic bottles daily, leading to the creation of a diverse range of aesthetically pleasing, durable, and premium-quality products.

Our product portfolio encompasses various offerings, ranging from our subsidiary Anaura to carpets, knitted fabric, fibers (both grey and dope dyed), technical textiles, filament yarn, spun yarn, and beyond.

As part of our ongoing efforts, we are actively establishing facilities for bottle-to-bottle chips production and venturing into the production of acoustic panels. These endeavors highlight our unwavering dedication to innovation and sustainability, further solidifying our position as industry leaders in responsible environmental practices.





INTRODUCTION TO PET FLAKES

Rudra Ecovation is one of the largest producers of PET Flakes in India. Our Recycled PET Flakes are a sustainable solution derived from post-consumer PET bottles. Every plastic bottle embarks on a meticulous journey, transforming into exquisite and sustainable fashion and style. Our washline processes 350 metric tons of bottles daily, recycling approximately 88 lakhs bottles.



After undergoing a thorough washing process, the bottles are expertly cut into flakes. These flakes then undergo a melting process at 270 degrees Celsius, resulting in the creation of skin-friendly products that embody both elegance and eco-consciousness.





PET FLAKES - TECHNICAL DATA SHEET

General Information:

Product Name: Recycled PET Flakes

Chemical Name & Synonyms: Polyethylene Terephthalate (PET)

Chemical Family: Polyester Family (Thermoplastic Polymer)

Product Type: Flakes Form

Input/Feed Material: Post-consumer PET bottles

PHYSICAL-CHEMICAL DATA

Specific Gravity: Heavier than water with a specific gravity ranging between 1.33 to 1.40

Chemical Stability: The polymer is chemically stable and resistant to attack by oils, weak acids, and weak alkalis.

Have great tensile strength, light weight, elasticity and stability over a wide range of temperatures





PET FLAKES NORMS

Norms for Washed PET Flakes (Fibre)		Norms for Washed PET Flakes (POY)	
Parameters	Grade	Parameters	Grade
	Natural		Natural
PVC	< 150 ppm	PVC	< 50 ppm
PP	Nil	PP	Nil
PP Wrapper	Nil	PP Wrapper	Nil
PVC Wrapper	< 50 ppm	PVC Wrapper	Nil
Stone	< 20 ppm	Stone	Nil
Fines (<01 mm)	< 0.10%	Fines (<01 mm)	< 0.20%
Metals	< 30 ppm	Metals	< 20 ppm
Rubber	< 20 ppm	Rubber	< 10 ppm
Moisture	< 1.00%	Moisture	< 1.00%
Fines (01 to 03 mm)	< 5.00%	Fines (01 to 03 mm)	< 3.00%
Others	< 50 ppm	Others	< 20 ppm
PC	< 50 ppm	PC	Nil
Colored Scrap	< 0.02%	Colored Scrap	< 0.02%
Glue contents	< 0.02%	Glue contents	< 0.02%



PET FLAKES APPLICATION

Washed Pet Flakes (Fibre Grade) :-

- Used in manufacturing a diverse range of recycled polyester staple fibers, catering to various industries and applications.
- Polyester Strapping: Utilized in the packaging industry for the fabrication of polyester strapping, offering strong and reliable packaging solutions.
- Manufacturing Polyester Films: Employed in the production of single and multi-layer films, serving as packaging materials for industrial packages and food products, ensuring durability and protection.

Washed Pet Flakes (Poy Grade) :-

Partially Oriented Yarn (POY) and Draw Textured Yarn (DTY) & Air Textured Yarn (ATY) Primarily used in the manufacturing of sports wear.





☎ + 91 161-5184000 ✉ info@rudraecovation.com 🌐 www.rudraecovation.com

📍 Rudra Ecovation Limited -Wood Stock Tower, Opp. Wave Mall Ferozpur Road ,
Ludhiana - 141008, Punjab - India.

