

Carbon Char

Recovered Carbon Char is obtained during the pyrolysis of waste tyres at 400–600°C in an oxygen-free environment. The product mainly contains carbon black originally used in tyres, along with mineral ash such as silica and zinc oxide.

The material is typically used as a cost-effective and sustainable alternative to virgin carbon black in rubber, plastics, construction materials, inks, coatings, and energy applications.



Typical Chemical Composition

Component	Carbon %	Fixed Carbon %	Ash Content %	Volatile Matter %	Moisture %	Sulphur %	Hydrogen %
Typical Range	75-85	75-80	15-20	3-5	≤ 0.30	1.0 – 3.0	0.5 – 1.0

Physical Properties

Component	Appearance	Particle Size (D50)	Surface Area	Density	pH Value	Calorific Value
Unit	%	µm	m ² /g	g/cm ³	-	kcal/kg
Typical Range	75-85	20-80	50-90	0.40 to 0.60	6 – 8	5500 – 6500

Applications

Rubber Industry	Plastics Industry	Construction	Energy
<ul style="list-style-type: none"> Rubber mats Conveyor belts Automotive rubber parts Footwear soles 	<ul style="list-style-type: none"> Masterbatch filler Pigment for HDPE / PP / PVC 	<ul style="list-style-type: none"> Asphalt modification Cement bricks Bitumen reinforcement 	<ul style="list-style-type: none"> Solid fuel for boilers and cement kilns

Packaging

- Big Bags: 450 Kg & 1000 Kg
- Bulk: Available
- Customized Packaging: As per customer requirement

Sustainability Information

- Derived from recycled tyres (ELT)
- Reduces landfill waste
- Can reduce CO₂ emissions by up to ~2.8 tons per ton compared to virgin carbon black production (industry estimates).

Global Rubber Operations - Gravita Group



3 Decades of Excellence