

PRODUCT DESCRIPTION

Industrial Carbon Black (Series N) is a premium range of reinforcing fillers specifically engineered for rubber applications. Our portfolio includes grades **N110**, **N220**, **N330**, **N550**, and **N660**, produced via the furnace process to ensure high purity and consistent particle morphology.

These grades are widely used in the manufacturing of tires (treads and sidewalls), conveyor belts, and industrial rubber goods. They act as critical reinforcing agents, significantly enhancing the mechanical properties, wear resistance, and longevity of the final rubber compounds. Compliant with **ISO 9001** and **REACH** standards.

KEY FEATURES & BENEFITS

- High Strength & Modulus:** Improves tensile strength, tear resistance, and modulus in rubber compounds, ensuring structural integrity under stress.
- Superior Load-Bearing Capacity:** Enhances the load capacity of rubber products, critical for heavy-duty tires and industrial belts.
- Excellent Wear Resistance:** Reduces abrasion wear and significantly extends service life, particularly in tire treads (e.g., N110, N220).
- UV Protection:** Absorbs UV radiation effectively, preventing rubber degradation and aging over time.
- Thermal Conductivity:** Improves heat dissipation within the rubber matrix, reducing dangerous heat buildup during dynamic operation.

RECOMMENDED APPLICATIONS

- Tire Manufacturing:** Tread compounds (passenger and truck tires), sidewalls, and inner liners.
- Industrial Rubber Goods:** Conveyor belts, transmission belts, hoses, and gaskets.
- Automotive Parts:** Molded rubber parts, vibration isolation mounts, and seals.
- Construction:** Rubber sheeting and roofing membranes.

TECHNICAL SPECIFICATIONS

Grade	N110	N220	N330	N550	N660
Iodine Adsorption (g/kg)	145 ± 8	121 ± 7	82 ± 7	43 ± 7	36 ± 5
Oil Absorption Number (OAN) (10 ⁻⁵ m ³ /kg)	113 ± 6	114 ± 6	102 ± 6	121 ± 7	90 ± 5
Compressed Oil Absorption (COAN)	91 - 103	92 - 104	82 - 94	80 - 90	69 - 79
Tint Strength (%)	115 - 131	108 - 124	96 - 112	—	—
CTAB Surface Area (m ² /g)	112 - 128	103 - 117	73 - 85	36 - 48	31 - 43
External Surface Area (m ² /g)	107 - 123	99 - 113	69 - 81	34 - 44	29 - 39
Total Surface Area (m ² /g)	120 - 134	107 - 121	72 - 84	35 - 45	30 - 40
Heat Loss (%)	≤ 3.0	≤ 2.5	≤ 2.0	≤ 1.5	≤ 1.5
300% Modulus Characteristic	-3.1 ± 1.5	-1.9 ± 1.5	-0.5 ± 1.5	-0.5 ± 1.5	-2.2 ± 1.5
Bulk Density (kg/m ³)	345 ± 40	355 ± 40	380 ± 40	360 ± 40	440 ± 40

PACKAGING & STORAGE

- **Packaging:** Available in **25kg paper bags** or **1000kg Jumbo Bags**. Plastic bags or palletized options are available upon request for standard export packing.
- **Storage Conditions:**
 - • **Dry & Cool:** Store in a well-ventilated area (humidity < 65%) to prevent moisture absorption.
 - • **Temperature Control:** Ideal temperature below 35°C; avoid extreme heat or freezing.
 - • **Avoid Sunlight:** Protect from direct UV exposure to maintain quality.

SAFETY INFORMATION

This product is generally considered non-hazardous. However, carbon black dust may cause mechanical irritation to eyes and the respiratory tract. Wear appropriate dust masks and gloves during handling. Refer to the Material Safety Data Sheet (MSDS) for detailed safety information.