

## HAWK PETROLEUM PTE LTD

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## **CARBON BLACK GRADES, APPLICATION & PROPERTIES**

ASTM GRADE	APPLICATION	PROPERTIES
GRADE : N 220 TYPE: INTERMEDIATE SUPER ABRASION FURNACE BLACK (ISAF) SIZE : (24-33 NM)	TRUCK & CAR TYRES / TREADS, CONVEYOR BELTS, MECHANICAL RUBBER GOODS, (MRG) PLASTIC COMPOUNDS (SEMI-CONDUCTIVE)	MEDIUM SURFACE AREA, MEDIUM STRUCTURE GRADE, LOWER HYSTERESIS WITH GOOD TEARCUT-CHIP PROPERTIES. GOOD GENERAL PURPOSE GRADE.
GRADE : N 234 TYPE: INTERMEDIATE SUPER ABRASION FURNACE BLACK (ISAF) SIZE : (24-33 NM)	TREAD RUBBER OF TYRES ( HEAVY TRUCKS, CARS),CAR TYRES, SEMI-CONDUCTIVE COMPOUNDS. (PREMIUM RADIAL TYRE TREADS)	HIGH SURFACE AREA GRADE, GOOD BALANCE OF TREAD WARE, TRACTION AND ROLLING RESISTANCE, VERY GOOD GENERAL PURPOSE GRADE.
GRADE : N 326 TYPE: HIGH ABRASION FURNACE BLACK (HAF) SIZE : (28-36 NM)	CONVEYOR BELTS, SEALS, HIGH PERFORMANCE COMPOUNDS, TYRE TREADS, GASKETS, MRG, PIGMENTS, PLASTICS, STEEL-WIRE COAT COMPOUNDS FOR RADIAL TYRES.	LOW SURFACE AREA, LOW STRUCTURE GRADE, LOW COMPOUND VISCOSITY, GOOD FATIGUE LIFE.
GRADE : N 330 TYPE:HIGH ABRASION FURNACE BLACK (HAF) SIZE : (28-36 NM)	TYRES ( SOLID, TREAD, CASTINGS, CORD) CONVEYOR BELTS, MRG, ROLLER & MOULDED GOODS, INKS, PAINTS, PLASTIC COMPOUNDS	GENERAL PURPOSE GOOD BALANCE OF PROPERTIES VIZ ABRASION RESISTANCE, HYTERESIS AND VISCOSITY.
GRADE : N 339 TYPE: HIGH ABRASION FURNACE BLACK (HAF) SIZE : (28-36 NM)	GENRAL PURPOSE TREAD RUBBER (HEAVY TRUCKS, CARS) CONVEYOR BELTS, RUBBER TUBES, HIGH WEAR RESISTANCE GOODS (INDL.)	MEDIUM SURFACE AREA , HIGH STRUCTURE GRADE, GOOD BALANCE OF TREAD WEAR AND HYSTERESIS.
GRADE : N 375 TYPE: HIGH ABRASION FURNACE BLACK (HAF) SIZE : (28-36 NM)	GENRAL PURPOSE TREAD RUBBER (HEAVY TRUCKS, CARS) CONVEYOR BELTS, RUBBER TUBES, HIGH WEAR RESISTANCE GOODS (INDL.)	MEDIUM SURFACE AREA, HIGH STRUCTURE GRADE( LOWER THAN N 339), GOOD BALANCE OF TREADWEAR AND HYSTERESIS.
GRADE : N 550 TYPE: FAST EXTRUSION FURNACE BLACK (FEF) SIZE : (50-70 NM)	TYRE INNER LINERS, TUBING, CARCASS,PROFILES, HOSES, HOSE COVERS, CABLE JACKETS, PLASTICS CONDUIT COMPDS,MRG, EXTRUDED GOODS, SEALS, BELTS, ANTI VIBRATION MOUNTINGS	MEDIUM SURFACE AREA AND MEDIUM STRUCTURE GRADE, GIVES LOW HEAT BUILD UP, LONG FATIGUE LIFE, STIFFNESS AND TENSILE STRENGTH, GENERAL PURPOSE GRADE.
GRADE : N 660 TYPE: GENERAL PURPOSE FURNACE BLACK (GPF) SIZE : (50-70 NM)	TYRE TUBE TYRE INNER LINER, INNERPLY, AUTOMOTIVE COMPONENTS-BELTS,HOSES, BODY MOUNTS MRG, PLASTICS, INJECTION MOULDED RUBBER GOODS	LOWER SURFACE AREA (COMPARED TO N 550), MEDIUM-LOW STRUCTURE GIVES LOWER HEAT BUILD-UP , LONG FATIGUE LIFE AND GOOD PROCESSIBILITY GENERAL PURPOSE GRADE.
GRADE : N 772 TYPE: SEMI REINFORCING FURNACE BLACK (SFR) SIZE : (70-90 NM)	INNER LINERS OF TYRES, EXTRUDED GOODS-HOSES, BELTS, MOULDED GOODS, PLASTICS, FOOTWEAR, SHEETS, GASKETS, MATS, PLASTICS COMPDS.	LOW SURFACE AREA AND LOW STRUCTURE GRADE, USED ON APPLICATIONS REQUIRING MINIMUM HYSTERESIS AND REINFORCEMENT THAT PROVIDES EXCELLENT PROCESSIBILITY.
GRADE : N 774 TYPE: SEMI REINFORCING FURNACE BLACK (SFR) SIZE : (70-90 NM)	BELTS, HOSES, FOOTWEAR, MOULDED GOODS RUBBER SHEETS, GASKETS, MATS, PLASTIC COMPDS., INNER LINERS OF TYRES	LOW SURFACE AND LOW STRUCTURE GRADE (HIGHER THAN N 772), USED IN APPLICATIONS REQUIRING MINIMAL HYSTERESIS AND REINFORCEMENT THAT PROVIDES EXCELLENT PROCESSIBILITY.
GRADE : N 990 TYPE: THERMAL SIZE : (250-350 NM)	(THERMAL CB) SPONGE RUBBER, GASKETS, WIPER BLADES	LOW SURFACE AREA AND LOWSTRUCTURE GRADE, REDUCED PERMEABILITY.
<b>GRADE</b> : PP 802	PRESSURE PIPES, BELTS, HOSES, O-RING, MRG, FOOD CONTACT POLYMER APPLICATION (LOW PAH)	US FDA COMPLIANT, PAH CONTENT 0.5 PPM MAX, GOOD ORGANOLEPTIC PROPERTIES, LOW ASH/ SULPHUR / SLEVE RESIDUE.