



NIKE GRIND RUBBER

TECHNICAL DATA SHEET

OCTOBER 2020



RUBBER



RUBBER

Cured rubber outsoles and flashings processed to various granulate sizes.

POTENTIAL APPLICATIONS

A wide range of properties suitable for applications such as sports surfaces, flooring and construction materials.

NIKE GRIND

Created by the regeneration of manufacturing scrap and end-of-life shoes, Nike Grind materials are high-performance, long-lasting and environmentally conscious, providing the ultimate foundation for the next generation of sustainable design.

PERFORMANCE CHARACTERISTICS

- Low liquid absorption
- Nike rubber formulations use 90% Nike environmentally preferred rubber
- Sound and force absorption

POST-INDUSTRIAL RUBBER



Rubber Granules 3–6 mm

POST-CONSUMER RUBBER



EU Post-Consumer Rubber 1–4 mm

The images above are examples of Post-Industrial and Post-Consumer Rubber materials. See the following page for a complete list of available Rubber materials.



RUBBER

POST-INDUSTRIAL AND POST-CONSUMER FOOTWEAR RUBBER FROM OUTSOLES AND FLASHINGS

GENERAL MATERIAL INFORMATION

MATERIAL COMPOSITION:	RUBBER Mechanically ground, sulphur-cured rubber originating from various Nike rubber outsole formulations. Ground rubber particles vary in mesh size and contain in general 70% (by weight) cured polymers (either polybutadiene, styrene butadiene, neoprene or natural rubber) along with 30% (by weight) additives (silica) and curing and processing aids.
COLOR OPTIONS:	Mixed (no color separation). Light (no black) or Dark (no white) mixes are available for post-industrial rubbers.
PRODUCT SOURCE:	Footwear manufacturing; Post-consumer footwear, samples and defectives
SOURCE LOCATION:	Indonesia, Vietnam, China, Belgium, U.S.
PRICING:	Per request
AVAILABILITY:	Per request

MATERIAL PROPERTIES	MCS
TOTAL ASH CONTENT (%):	24–33
ABRASION RESISTANCE (cm³ LOSS):	0.35
SHORE HARDNESS, SHORE A:	60–70
TENSILE STRENGTH (kg/cm²):	<120
SPECIFIC GRAVITY (WATER=1.0):	1.14–1.18
SPECIFIC GRAVITY (WATER=1.0) (WHITE, GREY AND FLUORESCENT):	1.19–1.23
ELONGATION LENGTH (%):	550
MODULUS OF ELASTICITY (300%) (kg/cm²):	35
MELTING POINT (°C):	200-210
THERMAL CONDUCTIVITY:	Not Determined
FLASH POINT (°C):	280

PRODUCT PROPERTIES

POST-INDUSTRIAL PROCESSED AND UNPROCESSED MANUFACTURING FOOTWEAR RUBBER FROM OUTSOLES AND COMPONENTS

MATERIAL:	PROCESSED RUBBER					UNPROCESSED RUBBER	
PRODUCT:	Rubber Granules 3–6	Rubber Granules 1–3	Rubber Granules 10–30 Mesh	Rubber Granules 30–40 Mesh	Rubber Powder	Rubber Outsole Components	Rubber Flashings
SIZING (mm):	3–6	1–3	2.0–0.6	0.6–0.4	40 mesh and under	Variable	~1 x (150–500)
DENSITY (g/cm³):	0.67	Not Determined	Not Determined	0.79	0.49	1.00	1.01

POST-CONSUMER RUBBER RECAPTURED AND PROCESSED FROM END-OF-LIFE FOOTWEAR

MATERIAL:	EU Rubber	U.S. Rubber
SIZING (mm):	1–4	1–3 and 3–5
DENSITY (g/cm³):	Not Determined	Not Determined
PURITY:	Not Determined	Not Determined





CONTACT

NIKEGRIND@NIKE.COM