

# Carbon Products for Machinery (Nicaseal) Characteristics Table

Attention: Artificial graphite is subject to export control. Therefore, you would need to obtain export license from Ministry of Economy, Trade and Industry (METI) of Japan, if you want to export them to countries outside of Japan by yourselves.

Name of material		Bulk Density (g/cm <sup>3</sup> )	Shore Hardness (HSD)	Young's Modulus (GPa)	Bending Strength (MPa)	Compressive strength (MPa)	Coefficient of Thermal Expansion (x10 <sup>-6</sup> /K)	Heat Resistant Temperature (°C)	Corrosion Resistance
L-220	Resin Bonded Product	1.83	58	12	59	127	14.5	170	Acid Resistance
L-229		1.75	72	17	78	216	15.8	170	
HC-5E3	Resin Impregnated Product	1.78	95	18	64	206	7.0	350	Acid Resistance/ Alkali Resistance
HC-6E3		1.80	93	18	59	176	7.1	350	
NHC-7E3		1.78	94	18	64	244	7.0	350	
IGS-743E3		1.93	72	12	67	160	4.8	350	
NS-20E		1.88	105	18	74	216	6.0	350	
NS-30E		1.90	72	16	69	200	5.0	350	
NS-103E		1.75	85	12	60	230	7.1	350	
EG-5E3		1.85	65	10	47	108	4.4	350	
NS-20	Non-Impregnated Product	1.79	98	16	61	152	5.5	—	Acid Resistance/ Alkali Resistance
NS-30		1.81	55	14	54	96	3.6	—	
EG-50		1.68	50	8	37	88	3.4	—	
EG-50K	Inorganic Compound Impregnated Product	1.80	56	10	50	107	3.8	—	—

•The measurement range for coefficients of thermal expansion is as follows:  
 room temperature to 170°C (for resin bonded products),  
 room temperature to 200°C (for resin impregnated products),  
 or room temperature to 500°C (for non-impregnated products).

## About the Representative Characteristics

- The values represent representative characteristics, and are not guaranteed.
- The heat resistant temperature is based on that of a resin. The heat resistant temperature varies depending on use conditions.
- The corrosion resistance varies depending on use conditions.
- For characteristics not found in the table, contact us.
- The maximum material dimensions vary depending on types. Contact us for details.