

General Features of SC CARBON®

Variety	Impregnation Substance *	Bulk density	Shore Hardness	Bending Strength (MPa)	Compressive Strength (MPa)	Charpy Impact Value (kJ/m ²)	Thermal Expansion Coefficient (×10 ⁻⁶ /°C)	Thermal Conductivity (W/(m·K))	Heat Resistant Temperature (in the atmosphere) (°C)	Limit PV Value ** (MPa · m/min)		Corrosion Resistance Group
										in the atmosphere	in the water	
NC-070	-	1.7	100	60	265	3.0	6	30	350	-	-	A
NC-07E	R	1.8	110	90	365	2.4	7	35	350	295	490	A
NC-071	M	2.7	100	110	490	4.0	7	210	350	215	295	C
NC-074	M	2.1	100	155	540	5.5	8	>210	500	70	295	D
NC-076	M	2.7	110	125	490	3.0	7	150	500	195	295	C
NC-S70	-	1.7	70	45	145	2.0	5	80	350	-	-	A
NC-S7E	R	1.9	90	80	165	2.5	6	60	350	390	-	A
NC-S7K	I	1.8	75	65	175	2.2	5	60	500	-	-	B
NC-S71	M	2.7	75	100	295	3.0	6	>210	350	325	785	C
NC-S76	M	2.7	80	95	225	3.0	7	>210	500	195	490	C
NC-171	M	2.7	60	90	195	3.0	6	>210	350	570	980	C
NC-176	M	2.7	70	80	186	3.0	6	>210	500	295	590	C

* M = Metal

R = Resin

I = Inorganic Compound

- = No Impregnation Substance

** Tester

PV value ≤ 3000 : Thrust Collar Type Friction Tester

PV value > 3000 : Wear Testing with a Pin-on-Disk Apparatus

Chemical Corrosion resistance Group

Recommendable Use Conditions

A	NC-070、NC-S70、NC-07E、NC-S7E No Impregnation Material / Resin Impregnation Material	Acid (More than 20% concentration nitric acid and more than 70% concentration sulfuric acid are omitted) Alkalis, halogen-family (bromine, iodine, fluorine are omitted), organic compound, solvents, water atmosphere.
B	NC-S7K Non-organic Chemical Compound Impregnation Material	High temperature environment in the atmosphere (water omitted)
C	NC-071、NC-S71、NC-171、NC-076、NC-S76、NC-176 Antimony-base Alloy Impregnation Material	Water, atmosphere, saline, organic compounds, alkalis, mild acid.
D	NC-074 Aluminium Alloy Impregnation Material	Oil lubrication, nonpolar solvents

* These are representative values, not guaranteed values.