

Supporting material:

S-Table.1

Designation	ZnO	MgO	Stearic Acid	Modified LDH	TMTD	Sulphur
XNBR001	--	--	--	4	1	0.5
XNBR002	5	--	2	--	1	0.5
NR001	--	--	--	4	1	0.5
NR002	5		2	--	1	0.5
SSBR001	--	--	--	4	1	0.5
SSBR002	5	--	2	--	1	0.5
CR001	--	4	--	4	1	0.5
CR002	5	4	1	--	1	0.5

S-Table.2

Designation	R _∞ dNm	T ₂ (min)	T ₉₀ (min)	200% Modulus	Tensile Strength (MPa)	Elongation at Break (%)
XNBR001	3.91	0.67	10.98	2.65 [0.05]	15.51 [1.46]	1100 [35]
XNBR002	4.52	1.98	13.12	2.36 [0.04]	11.98 [1.88]	838 [28]
NR001	2.99	1.44	4.95	0.82 [0.03]	7.22 [0.78]	1445 [51]
NR002	4.29	1.94	4.67	0.92 [0.06]	8.07 [1.02]	1340 [27]
SSBR001	4.93	1.15	7.08	0.89 [0.04]	1.76 [0.13]	609 [31]
SSBR002	5.38	1.38	9.99	0.90 [0.06]	1.82 [0.21]	592 [28]
CR001	8.71	0.87	10.85	2.03 [0.04]	9.32 [1.06]	1075 [55]
CR002	8.82	0.75	11.11	1.71 [0.05]	9.23 [2.84]	902 [36]

Values in the third brackets [] are the standard deviation out of five measurements