

Table S1. Structural formulas of the silanes used for the modification of FA.

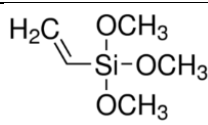
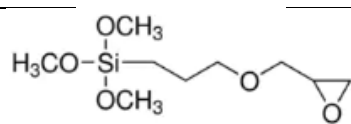
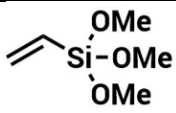
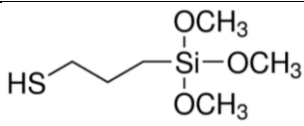
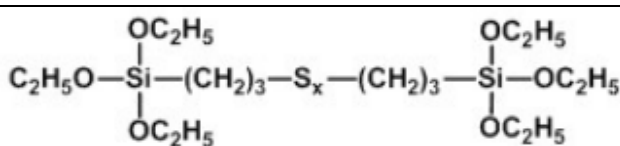
Silane	Structural formula
Vinyltrimethoxysilane - U-611	
3-(glycidoxypentyl)trimethoxysilane - U-50	
Vinyl-tris(2-methoxy-ethoxy)silane - LUVOMAXX VTMOEO DL50 C	
Mercaptopropyltrimethoxysilane - Dynaslan MTMO	
Bis(triethoxysilylpropyl)polysulfide - Si-266	

Table S2. Influence of thermal aging on hardness (H) of the rubber vulcanizates.

Sample	Parameter	H [°ShA]	H after ageing [°ShA]	ΔH [%]
CB+FA		71	72	+1.4
CB+FA-63		68	68	0.0
CB+FA-125		66	66	0.0
CB+FA-250		66	66	0.0
CB+FA-63-U-50		76	76	0.0
CB+FA-125-U-50		76	74	-2.7
CB+FA-250-U-50		75	74	-1.4
CB+FA-63-U-611		68	66	-3.0
CB+FA-125-U-611		67	66	-1.5
CB+FA-250-U-611		66	66	0.0
CB+FA-63-Si-266		77	75	-2.7
CB+FA-125-Si-266		76	76	0.0
FA-250-Si-266		74	75	+1.3
CB+FA-63-VTMOEO		67	66	-1.5
CB+FA-125-VTMOEO		65	66	+1.5
CB+FA-250-VTMOEO		65	65	0.0
CB+FA-63-MTMO		71	71	0.0
CB+FA-125-MTMO		70	70	0.0
CB+FA-250-MTMO		69	69	0.0

Studies were carried out according to PN-ISO 188:2000. in the KC-65 type thermal chamber. Rubber samples were aged at 70 °C, for 72 hrs.