

Supporting information

Dual silicon side chains modification of one-component polysulfide adhesives for excellent mechanical properties and solvent resistance

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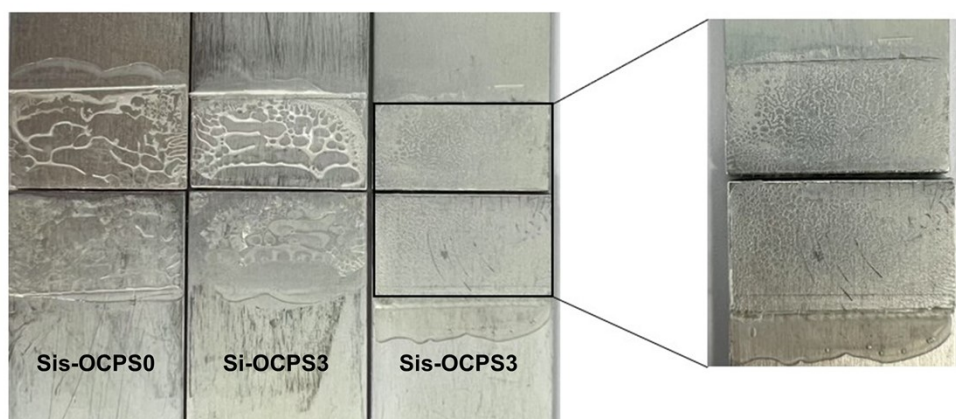


Figure S1. The failure interface pictures after shear strength of Sis-OCPS0, Si-OCPS3 and Sis-OCPS3.

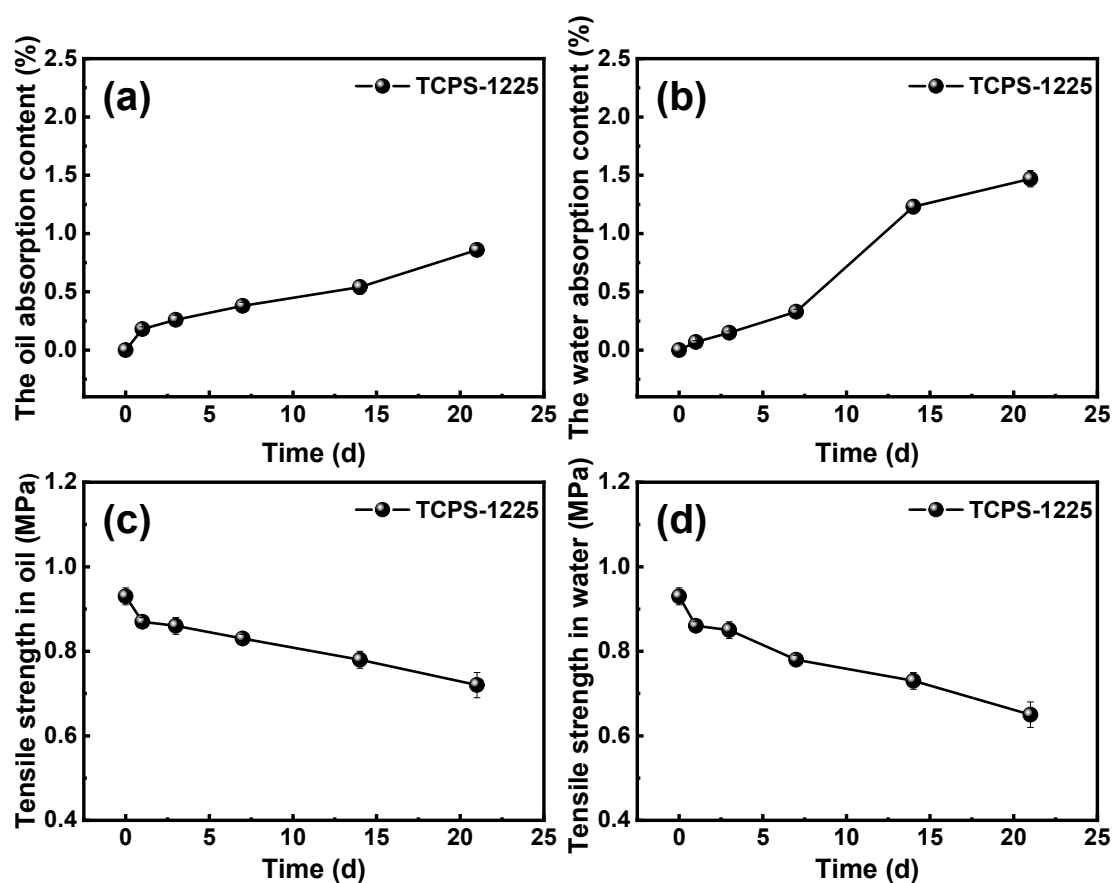


Figure S2. The oil (a) and water (b) absorption content and tensile strength after immersion in the oil (c) and water (d) of TCPS-1225.

Table S1. The average interdomain spacing (d) values of Sis-OCPS1, Sis-OCPS3, Sis-OCPS0 and Si-OCPS3.

Samples	d (nm)
Sis-OCPS1	-
Sis-OCPS3	20.08
Sis-OCPS0	18.47
Si-OCPS3	15.86

Table S2. The average roughness metrics values (R_a) of Sis-OCPS1, Sis-OCPS3, Sis-OCPS0 and Si-OCPS3.

Samples	R_a (nm)
Sis-OCPS1	124.48
Sis-OCPS3	54.94
Sis-OCPS0	36.62
Si-OCPS3	35.13

Table S3. The contact angle and hardness of Sis-OCPS3, Sis-OCPS0 and Si-OCPS3.

Samples	Contact angle (°)	Hardness (Shore C)
Sis-OCPS3	40.72 ± 0.23	75 ± 2
Sis-OCPS0	43.95 ± 0.15	62 ± 3
Si-OCPS3	53.70 ± 0.17	49 ± 2

Table S4. The shear strength of Sis-OCPS3 and TCPS-1225 on epoxy, steel and alumina plates

Samples	Sis-OCPS3	TCPS-1225
Epoxy plates (MPa)	2.39 ± 0.32	0.53 ± 0.22
Steel plates (MPa)	0.86 ± 0.16	0.34 ± 0.15
Alumina plates (MPa)	4.72 ± 0.27	0.67 ± 0.31