

ID sample	Dehydration				Dehydroxylation and/or decomposition OC				Decomposition of carbonates				Polymorphic transformation, sintering behaviour and/or decomposition of sulphates				L.O.I. (%)	R.M. (%)	CaCO ₃ % (600-850°C)
	<200°C				200-600°C				600-850°C				>850°C						
	ΔW (%)	DTG (°C)	DSC(a) (°C)	EGA	ΔW (%)	DTG (°C)	DSC(a,b) (°C)	EGA	ΔW (%)	DTG (°C)	DSC(a) (°C)	EGA	ΔW (%)	DTG (°C)	DSC (°C)	EGA			
BS1	0.85	96.9	-	-	4.41	337.0	341 .2 (b)	CO ₂	38.54	759.4	759 .6	CO ₂	0.18	-	-	-	43.98	56.02	87.5
BS2	0.73	86.8	-	-	3.28	341.0	341 .2 (b)	CO ₂	39.42	796.9	797 .8	CO ₂	0.13	-	-	-	43.56	56.44	89.5
PAL1	0.03	85.1	-	-	2.63	385.6	385 .5 (b)	CO ₂	40.42	783.0	784 .0	CO ₂	0.11	-	-	-	43.19	56.81	91.8
PAL2	0.42	67.2	-	-	1.80	-	-	-	41.18	779.0	776 .4	CO ₂	0.07	-	-	-	43.47	56.53	93.5
T11C	0.48	105.0	-	-	2.19	-	388 .0 (b)	CO ₂	41.30	760.1	755 .5	CO ₂	0.02	-	-	-	43.99	56.01	93.8
T11L	0.00	111.1	112 .9	-	1.61	-	-	-	40.18	758.6	755 .6	CO ₂	0.11	-	-	-	41.90	58.10	91.2
T12	1.05	69.5	94 .7	-	4.52	-	352 .7 (b)	-	33.46	786.5	785 .1	CO ₂	0.35	-	-	-	39.38	60.62	76.0
T20	0.44	118.8	119 .6	-	2.54	-	-	-	39.62	793.2	791 .2	CO ₂	0.17	-	-	-	42.77	57.23	89.9
T20_1	0.06	108.3	-	-	1.07	-	-	-	41.45	790.8	789 .1	CO ₂	0.02	-	-	-	42.60	57.40	94.1
T21	0.28	91.9	97 .3	-	1.96	-	-	-	30.85	792.9	790 .8	CO ₂	0.24	-	-	-	33.33	66.67	70.0
T76C	0.31	91.1	102 .5	-	2.39	-	378 .9 (b)	-	34.64	807.9	804 .0	CO ₂	0.09	-	-	-	37.43	62.57	78.6
T76L	0.07	94.2	105 .8	-	1.43	-	-	-	30.83	819.2	816 .2	CO ₂	0.06	-	-	-	32.39	67.61	70.0
T109C	0.16	84.7	99 .7	-	2.49	-	-	-	39.29	800.7	797 .0	CO ₂	0.01	-	-	-	41.95	58.05	89.2
T110C	0.30	82.2	-	-	1.96	-	-	-	39.63	773.4	771 .2	CO ₂	0.16	-	-	-	42.05	57.95	90.0
T110C_1	0.75	90.0	93 .5	-	4.55	329.0	342 .9 (b)	-	32.96	612 .0÷801 .7	798 .7	CO ₂	0.22	-	-	-	38.48	61.52	74.8
T210	0.50	72.0	-	-	4.89	382.9	389 .7 (b)	CO ₂	34.97	772.7	769 .3	CO ₂	0.01	-	-	-	40.37	59.63	79.4
T210L	0.28	103.5	99 .1	-	3.00	-	-	-	38.02	813.1	812 .4	CO ₂	0.08	-	-	-	41.38	58.62	86.3
T314C	0.24	89.0	-	-	8.24	348 .6÷590 .1	363 .6 (b)	-	32.67	766.8	769 .1	CO ₂	0.30	-	-	-	41.45	58.55	74.2
T314L	0.04	77.3	-	-	3.40	-	-	-	36.78	636 .1÷786 .2	783 .2	CO ₂	0.03	-	-	-	40.25	59.75	83.5
TN2	3.05	128.1	133 .4	-	2.63	-	-	-	35.03	744.1	743 .6	CO ₂	0.22	-	-	-	40.93	59.07	79.5
TN3	0.25	94.2	-	-	2.77	350.6	352 .8 (b)	-	39.64	784.4	784 .1	CO ₂	0.11	-	-	-	42.77	57.23	90.0
TN4	0.40	100.5	109 .4	-	2.64	333.0	339 .2 (b)	CO ₂	40.25	808.3	804 .6	CO ₂	0.14	-	-	-	43.43	56.57	91.4
TN5	1.57	126.6	131 .8	-	2.06	-	-	-	37.68	777.3	775 .3	CO ₂	0.10	-	-	-	41.41	58.59	85.5

Legend: ΔW: weight loss (by TG); L.O.I.: Loss On Ignition; R.M.: Residual Mass; OC: Organic Compounds; a: endothermic peak; b: exothermic peak.

S2 Table. Thermal analysis data. Weight-losses and enthalpy changes of analysed samples by STA analyses. Negative peaks observed on derivative thermogravimetric curves (DTG) are also reported.