

Table S1. Volatile flavor substances and content in the inner and surface CQTB.

No	Compound name and classification	CAS	Absolute content (μg/kg)	
			Inner	Surface
Phenols				
A1	2,5-Dimethylphenol	95-87-4	-	94.19±11.6 ^a
A2	2,6-Dimethoxyphenol	91-10-1	35.15±3.59 ^b	90.95±10.33 ^a
A3	2-Methoxy-5-methylphenol	1195-09-1	120.04±14.46 ^b	246.63±30.21 ^a
A4	3,5-Dimethylphenol	108-68-9	46.19±1.26 ^a	48.75±5.36 ^a
A5	3-Ethyl-5-methylphenol	698-71-5	-	10.98±1.21 ^a
A6	4-Ethyl-2-methoxyphenol	2785-89-9	62.08±1.60 ^b	161.83±20.36 ^a
A7	4-Ethylphenol	123-07-9	13.04±0.54 ^b	44.04±5.12 ^a
A8	2-Methoxy-4-propylphenol	2785-87-7	2.46±0.24 ^b	26.49±3.12 ^a
A9	Eugenol	97-53-0	2.77±0.24 ^b	11.29±1.28 ^a
A10	Guaiacol	90-05-1	161.01±14.57 ^b	244.33±14.57 ^a
A11	O-cresol	95-48-7	110.53±2.89 ^b	248.09±28.56 ^a
A12	P-cresol	106-44-5	92.06±8.53 ^b	310.71±42.51 ^a
Aldehydes				
B1	1-Nonanal	124-19-6	168.82±12.25 ^b	227.73±19.77 ^a
B2	2-Ethyl-2-hexenal	645-62-5	-	37.94±4.25 ^a
B3	6-(Acetoxy)-4-methyl-4-hexenal	35334-60-2	-	42.12±5.36 ^a
B4	Heptanal	111-71-7	40.54±1.53 ^a	31.06±4.16 ^b
B5	N-hexanal	66-25-1	184.1±6.01 ^a	-
B6	Phenylacetaldehyde	122-78-1	-	50.96±5.12 ^a
Hydrocarbons				
C1	2-Methylnaphthalene	91-57-6	-	12.64±1.26 ^a
C2	Acenaphthene	83-32-9	3.25±0.39 ^b	39.63±5.02 ^a
C3	Dodecane	112-40-3	-	22.56±2.26 ^a
C4	N-hexadecane	2801-87-8	1.00±0.17 ^a	-
C5	N-octane	111-65-9	15.91±1.39 ^b	123.54±18.3 ^a

C6	α -Cedrene	469-61-4	0.82 ± 0.14^b	32.51 ± 3.22^a
Ketones				
D1	1-(2-Hydroxy-5-methylphenyl)ethanone	1450-72-2	6.19 ± 0.58^b	19.11 ± 2.25^a
D2	1-Indanone	83-33-0	7.61 ± 0.72^b	16.5 ± 1.78^a
D3	2-Nonanone	821-55-6	-	55.69 ± 5.65^a
D4	Ethyl cyclopentaenol ketone	21835-01-8	14.88 ± 1.86^b	18.79 ± 2.18^a
D5	3-Methyl-2-cyclopenten-1-one	2758-18-1	-	30.8 ± 4.12^a
D6	Methyl cyclopentenolone	80-71-7	107.64 ± 2.51^b	121.17 ± 15.21^a
Esters				
E1	Ethyl 2-methylbutyrate	7452-79-1	3.32 ± 0.46^a	-
E2	Ethyl isovalerate	108-64-5	17.95 ± 0.61^a	6.28 ± 0.61^b
Acids				
F1	2-Methyl butyric acid	116-53-0	43.54 ± 4.12^b	68.09 ± 6.12^a
F2	Octanoic acid	124-07-2	14.61 ± 1.83^a	-
Alcohols				
G1	1-Octene-3-ol	3391-86-4	-	9.82 ± 1.20^a
Ethers				
H1	1,2-Dimethoxybenzene	91-16-7	28.6 ± 2.33^b	63.94 ± 7.21^a
Others				
I1	3,4-Dimethoxytoluene	494-99-5	18.03 ± 1.59^b	120.82 ± 10.25^a
I2	1,2,3-Trimethoxybenzene	634-36-6	9.15 ± 1.25^b	13.92 ± 1.49^a
I3	1,2-Dimethoxy-4-ethylbenzene	30405-75-5	8.84 ± 1.03^b	35.6 ± 4.28^a

Different superscript letters in the same row indicate significant differences ($p < 0.05$), CAS: Chemical Abstract

Services registry number.