Electronic Supplementary Material (ESI) for RSC Advances.

Supplementary data

Preparation Optimization of Dialdehyde Soybean Polysaccharide by Response Surface Methodology for Cleaner Leather Tanning

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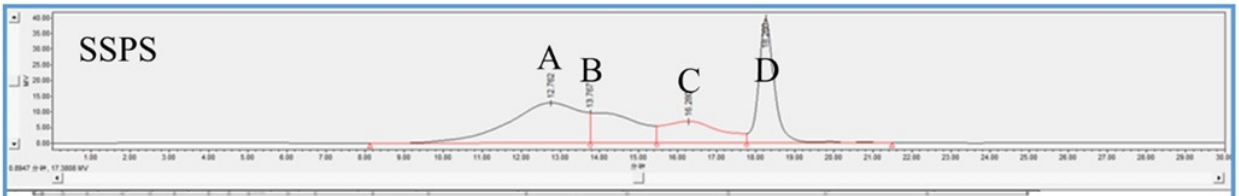
It was fatliquored according to the processes shown in Table S1

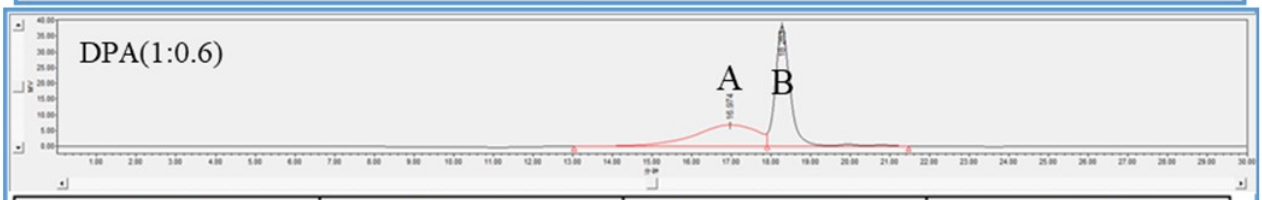
Table S1. Fatliquoring processes

Process	Chemicals	Quantity/%	Duration/min	Temperature/°C	pH
Neutralization	Water	200	120	30	6
	Neutralizing agent[a]				
Fatliquoring	Water	200	120	50	3.8
	Fatliquor	10			
	Formic acid		60		
Washing	Water	800	10	25	

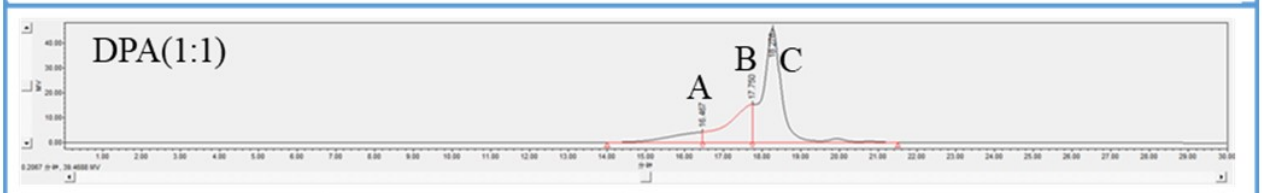
[a] Sodium bicarbonate (10%) for traditional chrome tanning; formic acid (1%) for DPA tanning.



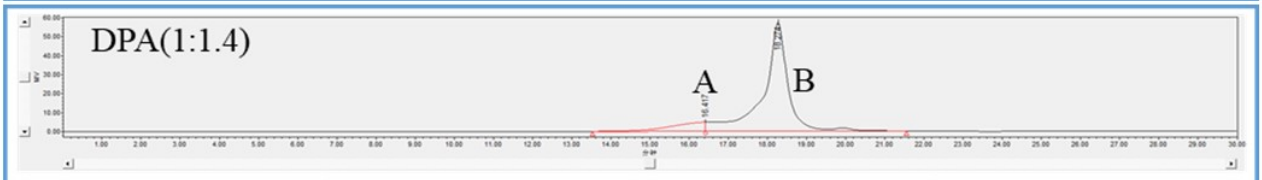
component	Retention time(min)	Peak molecular weight（MP）	area（%）
A	12.762	811110	38.84
B	13.767	291071	18.79
C	16.280	22351	16.55
D	18.260	2958	25.82



component	Retention time(min)	Peak molecular weight（MP）	area（%）
A	16.974	11000	42.86
B	18.283	2889	57.14



component	Retention time(min)	Peak molecular weight（MP）	area（%）
A	16.467	18463	9.78
B	17.750	4980	27.03
C	18.276	2910	63.20



component	Retention time(min)	Peak molecular weight（MP）	area（%）
A	16.417	19431	10.23
B	18.274	2916	89.77

Fig. S1. GPC diagram and peak molecular weight of SSPS and different DPAs.