



Supporting Information

for

Preparation of β -cyclodextrin/polysaccharide foams using saponin

Max Petitjean and José Ramón Isasi

Beilstein J. Org. Chem. **2023**, *19*, 78–88. doi:10.3762/bjoc.19.7

**Percent yields reached following different synthetic paths,
additional SEM micrographs, infrared spectra of the samples
in the fingerprint region, table with compositions of the
reacting mixtures**

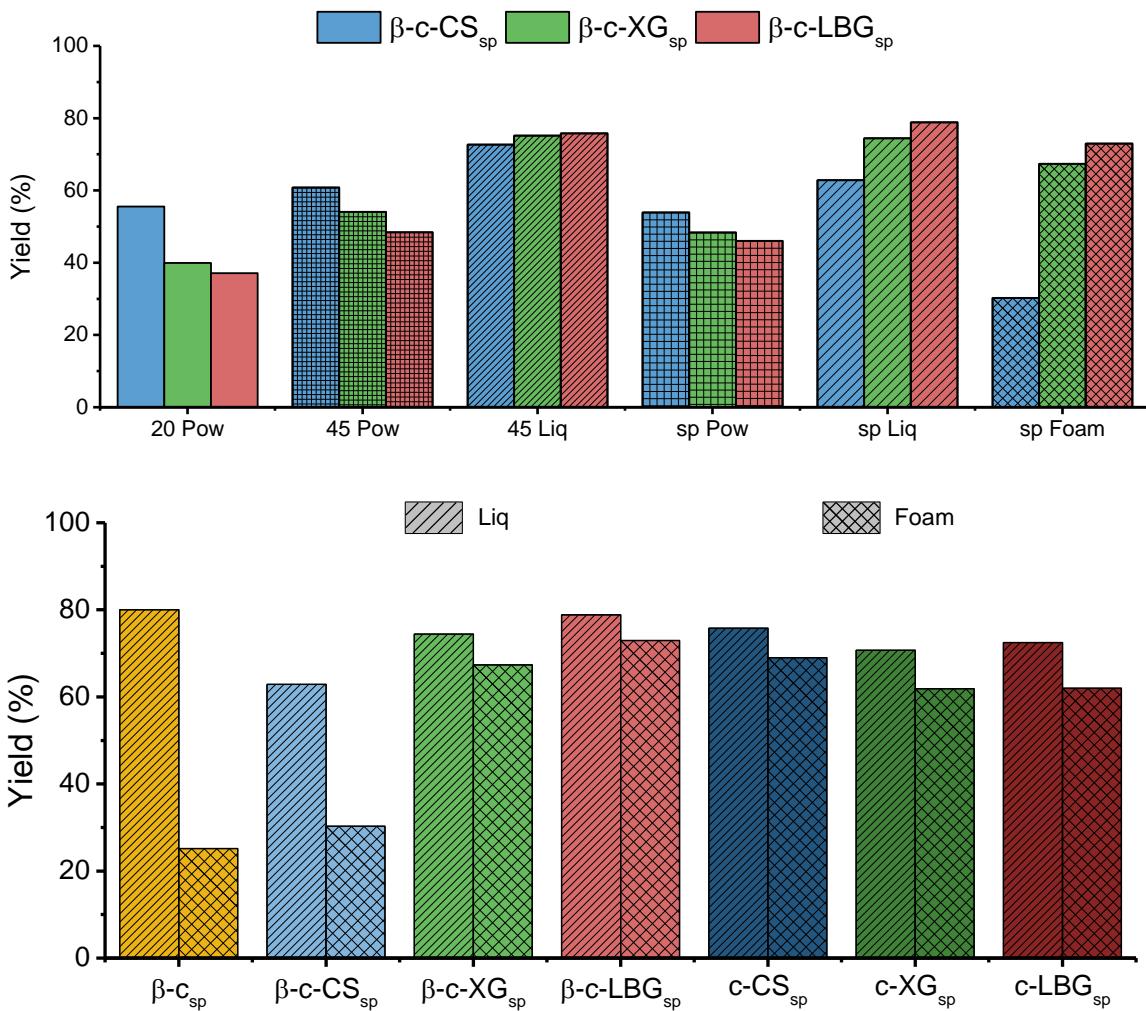


Figure S1. Percent yields reached following different synthetic paths (top) and comparison of the last two methods prepared using different CD:PS ratios (bottom).



Figure S2. SEM of β -c_{sp} matrix unwashed showing outer (left) and inner(right) micrographs.

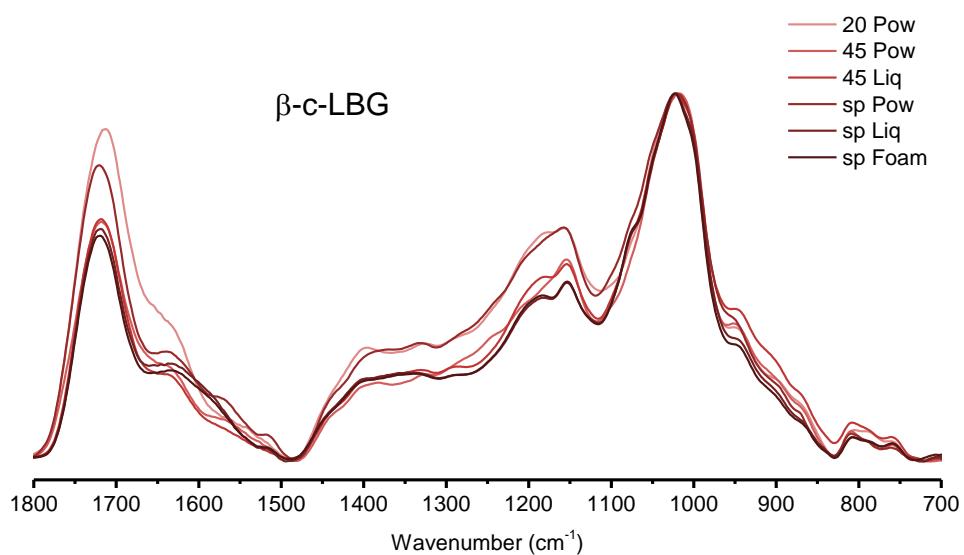
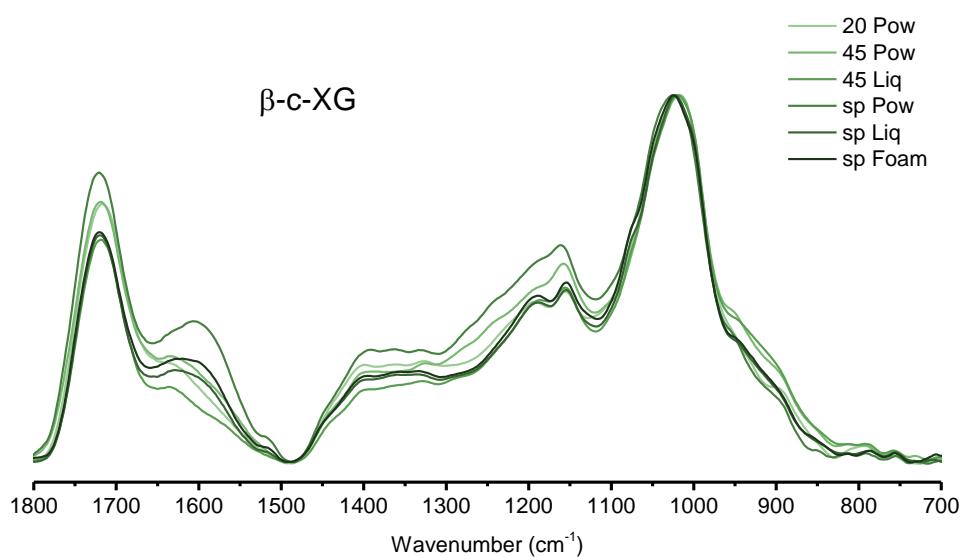
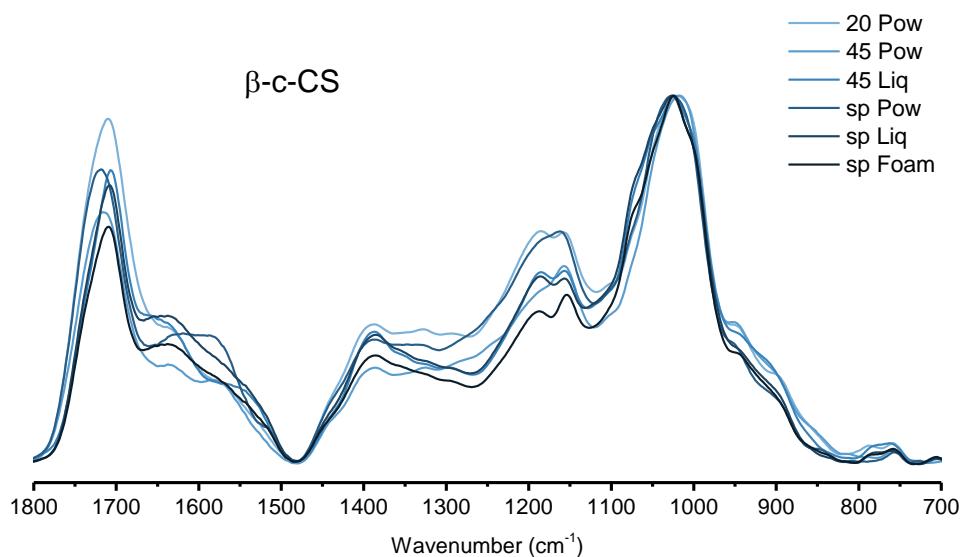


Figure S3. Infrared spectra in the fingerprint region for the three polysaccharide matrices as a function of the preparation method.

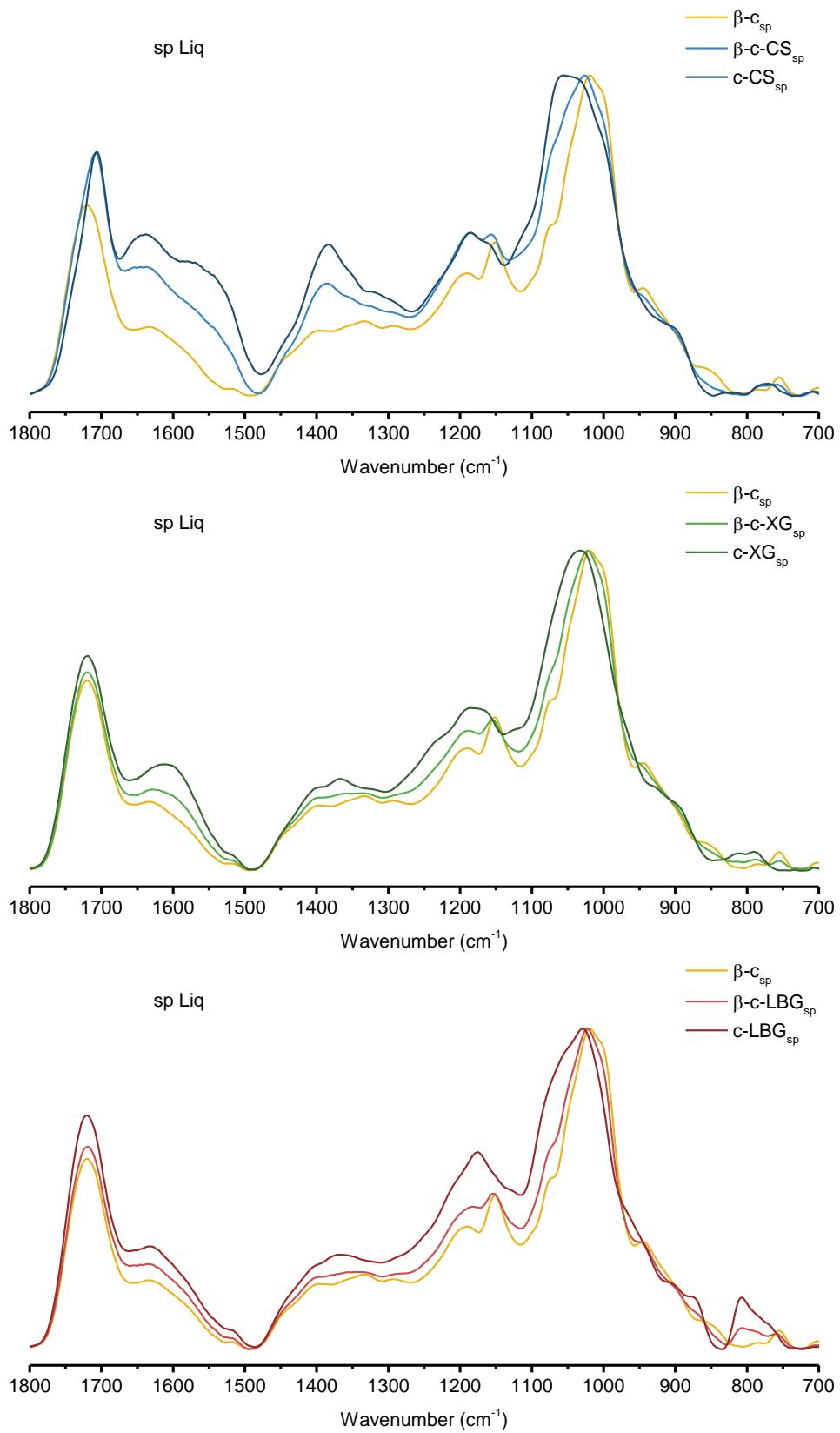


Figure S4. Infrared spectra in the fingerprint region for matrices prepared using saponin by the “liquid path” for pure crosslinked cyclodextrin compared to the three polysaccharides with or without cyclodextrin.

Table S1. Amounts of components (in g) used to prepare saponin crosslinked matrices.

Names	CTR	XG	LBG	CS	βCD	Sapo	Na ₂ HPO ₄
c-XG _{sp}	1.3	1.5	/	/	/	0.5	0.28
c-LBG _{sp}	1.3	/	1.5	/	/	0.5	0.28
c-CS _{sp}	1.3	/	/	1.5	/	0.5	0.28
β-c-XG _{sp}	1.3	0.75	/	/	0.75	0.5	0.28
β-c-LBG _{sp}	1.3	/	0.75	/	0.75	0.5	0.28
β-c-CS _{sp}	1.3	/	/	0.75	0.75	0.5	0.28
β-c-Sp	1.3	/	/	/	1.5	0.5	0.28