

Supporting Informations

**Catalytic upgrading of lactose:
a rest raw material from the dairy industry**

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Table S1 - Data referring to Figure 1 in the manuscript.

T	t (h)	Lactose (% mol)	Lactitol (% mol)	Glucose (% mol)	Galactose (% mol)	Reduced (% mol)
150	0	100	0	0	0	0
	1	63	19	6	7	1
	3	38	18	13	14	11
	6	24	12	16	18	23
160	0	100	0	0	0	0
	1	50	14	13	15	8
	3	20	6	21	26	25
	6	5	3	18	17	57
180	0	100	0	0	0	0
	1	2	0	17	19	61
	3	0	0	14	10	70
	6	0	0	4	2	75
200	0	100	0	0	0	0
	1	0	0	4	7	59
	3	0	0	2	1	68
	6	0	0	0	1	41

Figure S1 – Reaction profile of lactose hydrolysis + reduction with Cu/SiO₂ (180°C, 10 atm, 200 mg cat, 1 g lactose, 40 mL H₂O)

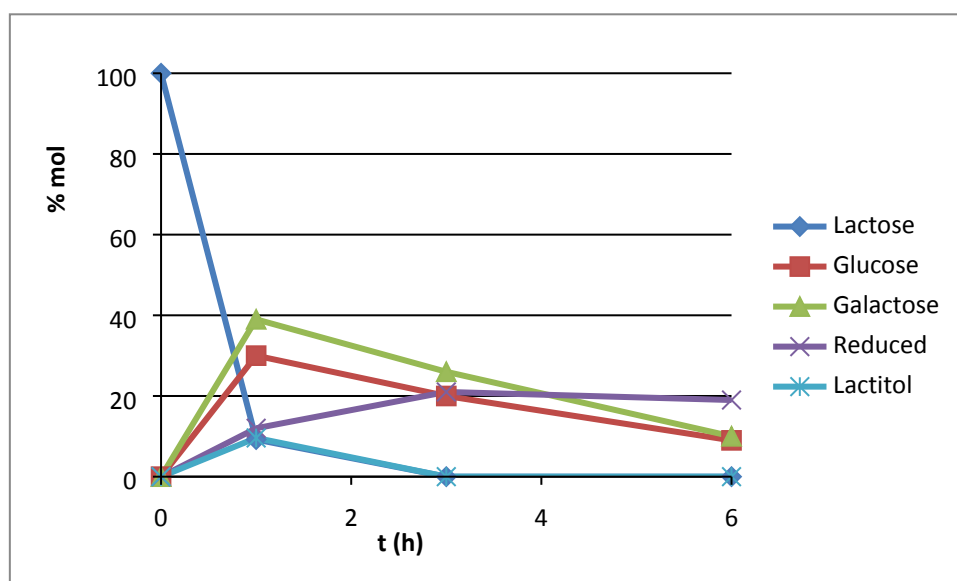


Figure S2 – Comparison of $^1\text{H-NMR}$ of raw reaction mixture and the one of dulcitol, obtained by crystallisation with EtOH .

