Partial and Total Solvent-free Limonene's Hydrogenation: Metals, Supports, Pressure, and Water Effects

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Catalyst/support	Catalyst loading (%)		
	As specified by the commercial supplier	Analyzed after an aqua regia mineralization by ICP/MS	
Rh/C	5	1.4*	
Rh/Alumina	5	3.2	
Pt/C	5	4.3	
Pt/Alumina	5	4.5	
Pt/Silica	1	0.8	
Pd/C	10	9.8	
Pd/C	5	5.0	
Pd/Alumina	10	9.9	
Pd/Silica	2.1	2.0	
Ru/C	5	3.1	
Ru/Alumina	5	3.8	

Table S1: Catalyst loadings measured by ICP/MS.

*Incomplete digestion was observed for this sample. Note that the aqua regia may not be enough to fully dissolve recalcitrant phases such as Alumina or C: it allowed a strong acidic leaching of the catalyst from its support phase. Catalyst loading determined by ICP/MS should be considered therefore as the amount of catalyst available using aqua regia rather than the total metallic loading. Nevertheless, with an exception for Rh/C where an incomplete digestion was observed, all other catalyst loadings determined by ICP/MS were close to the value specified by the commercial supplier.

Table S2: Rh-based catalysts features (Nanoparticles size, metal dispersion, Pores volume, Pores diameter, and surface area) As Given by TEM, H_2 chemisorption, and N_2 Adsorption/Desorption

	Rh/C	Rh/Alumina
Particles size (nm)	0.93	0.76
Metal dispersion (%)	23.4	24.0
Pores volume (cm^3/g)	07	0.4
Pores diameter (Å)	10,8	74.5
Surface area (m^2/g)	815	150

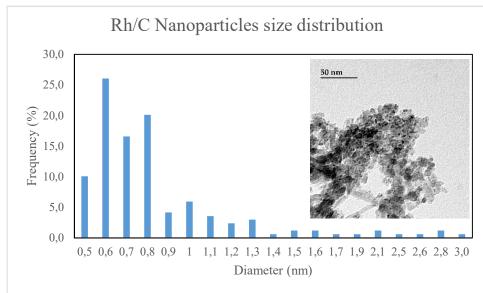


Figure 1S: Rh/C Particles size distribution measured by TEM

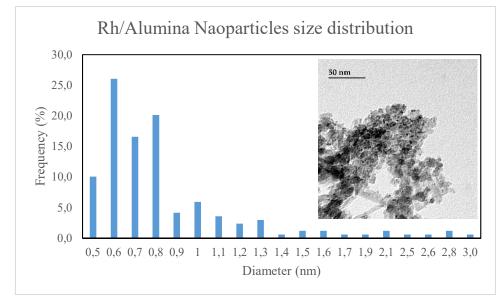


Figure 2S: Rh/Alumina Particles size distribution measured by TEM