

Supplementary Information

Effects of support specific surface area and active metal on the performance of biphenyl selective hydrogenation to cyclohexylbenzene

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Table S1 Cycle stability over the available catalysts for BP hydrogenation.

Catalyst	Number of cycles	Conversion of BP(%)	Selectivity of CHB (%)	Yield of CHB (%)	Reference
^a 20%Ni/SiO ₂ -300	5	79.2	98.3	77.9	This work
^b 1.5wtRu/SiO ₂ -DI	4	46.9	11.6	5.4	[1]
^c 25%Ni/SiO ₂	5	99.8	95.9	95.7	[2]
^d Ni-Ru/SiO ₂ -SEA	5	97.9	96.1	94.1	[3]

Reaction conditions: ^a 120°C, 2.0MPa, 80min; ^b 90°C, 2.0MPa, 80min; ^c 200°C, 3.0MPa, 180min; ^d 160°C, 2.0MPa, 180min.

References

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