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# Remarkable effect of extremely dilute $\text{H}_2\text{SO}_4$ on the cellulose conversion to ethylene glycol

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**Keywords:** Cellulose, ethylene glycol, glycol aldehyde, sulfuric acid, tungstic acid, Ru/C.

Highlights

- The glycolaldehyde yield was increased by 56% in 1min after the addition of  $\text{H}_2\text{SO}_4$ .
- The ethylene glycol yield was enhanced from 32.6% to 52.6%.
- The optimum molar ratio of  $\text{H}_2\text{SO}_4/\text{H}_2\text{WO}_4$  was 0.03.
- Weakly acidic sulfates (e.g.,  $\text{CuSO}_4$ ) were also found to be highly efficient additives.

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