

Supplementary Materials

for

Enhanced degradation of decabromodiphenyl ether via synergetic assisted mechanochemical process with lithium cobalt oxide and iron

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15 Figures

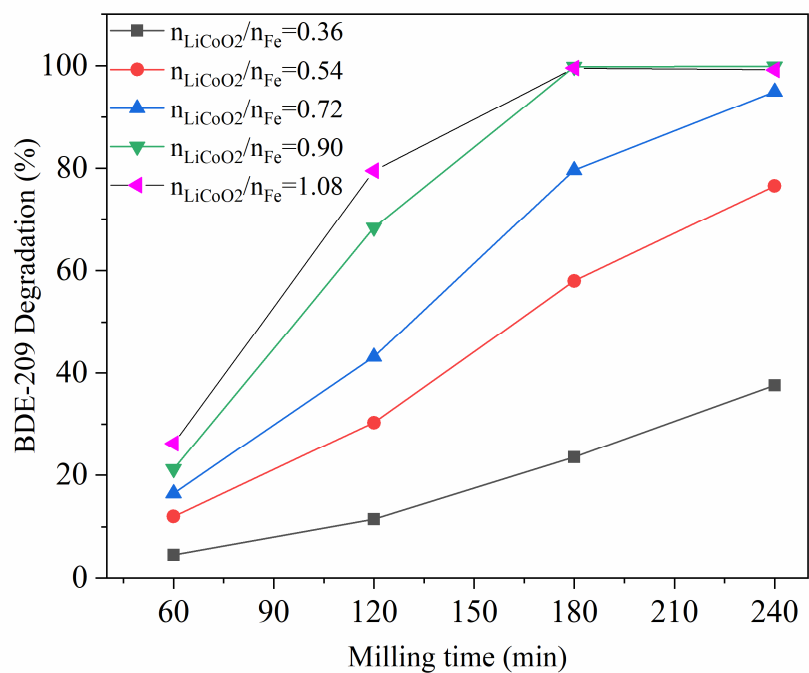


Figure S1. The effect of grinding reagent molar ratio between LiCoO_2 and Fe ($n_{\text{LiCoO}_2}/n_{\text{Fe}}$) on the degradation of BDE209 in MC treatment.

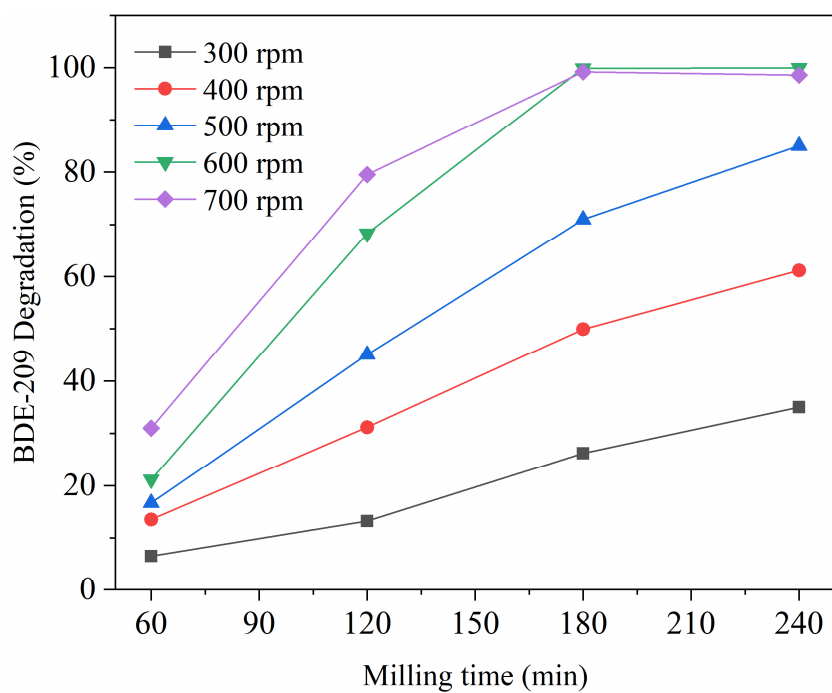


Figure S2. The effect of rotation speed on the degradation of BDE209 in MC treatment.

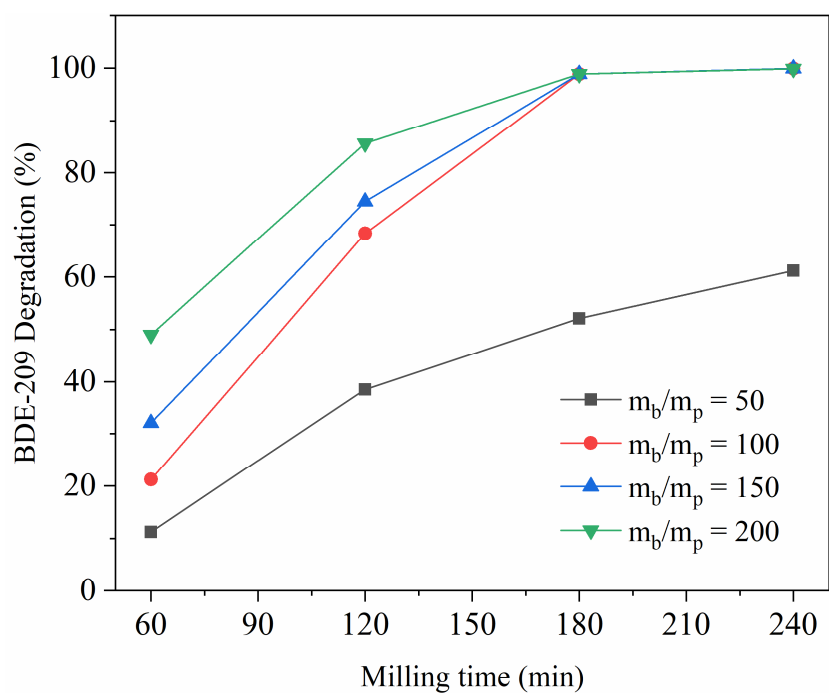


Figure S3. The effect of ball-to-powders mass ratio (m_b/m_p) on the degradation of BDE209 in MC treatment.

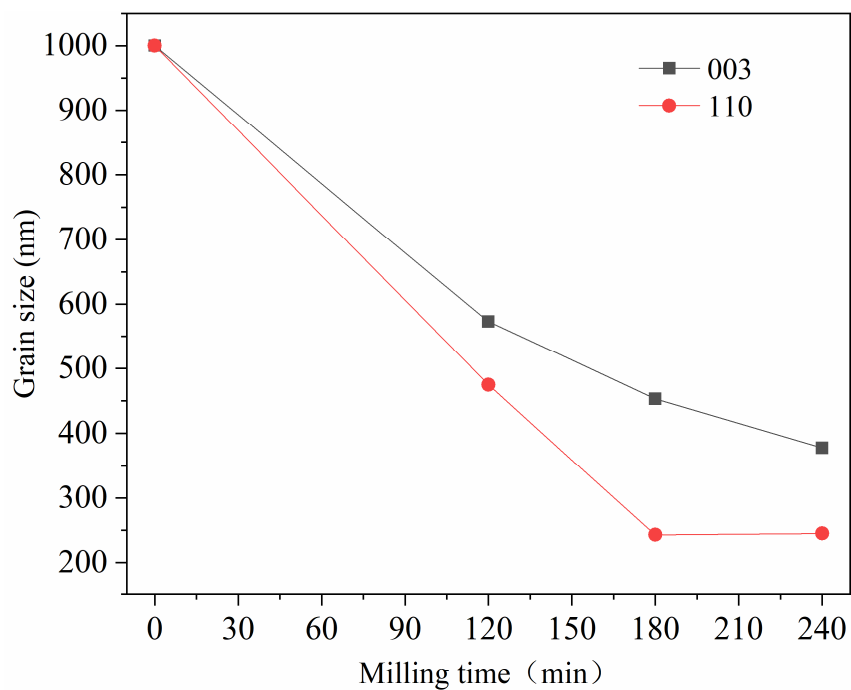


Figure S4. Grain size changes of different crystal plane with varying milling time.

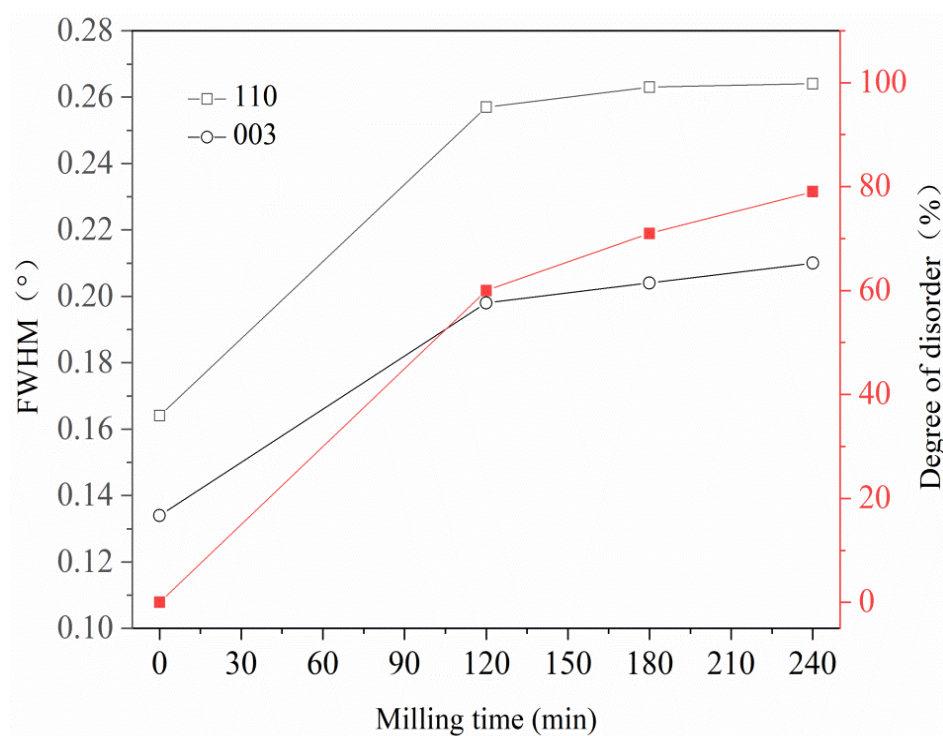


Figure S5. FWHM and disorder degree changes of different crystal plane with varying milling time.

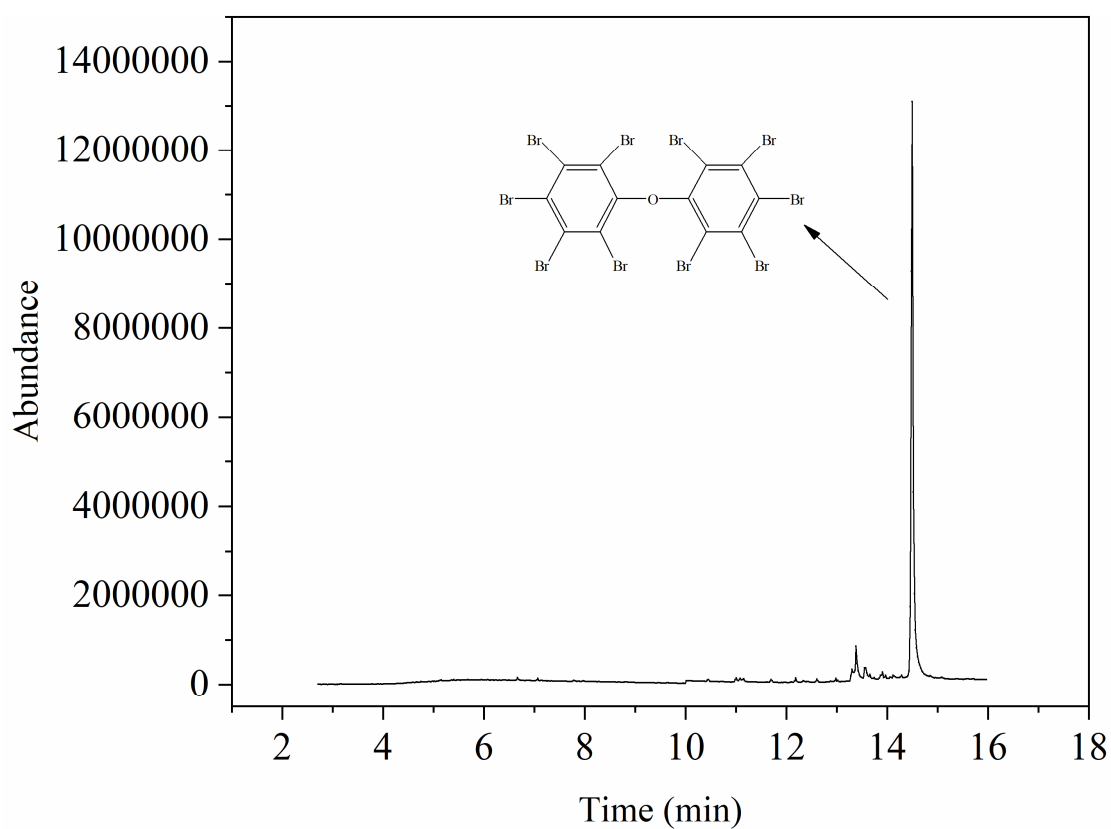


Figure S6. GC chromatogram of BDE 209 before MC treatment.

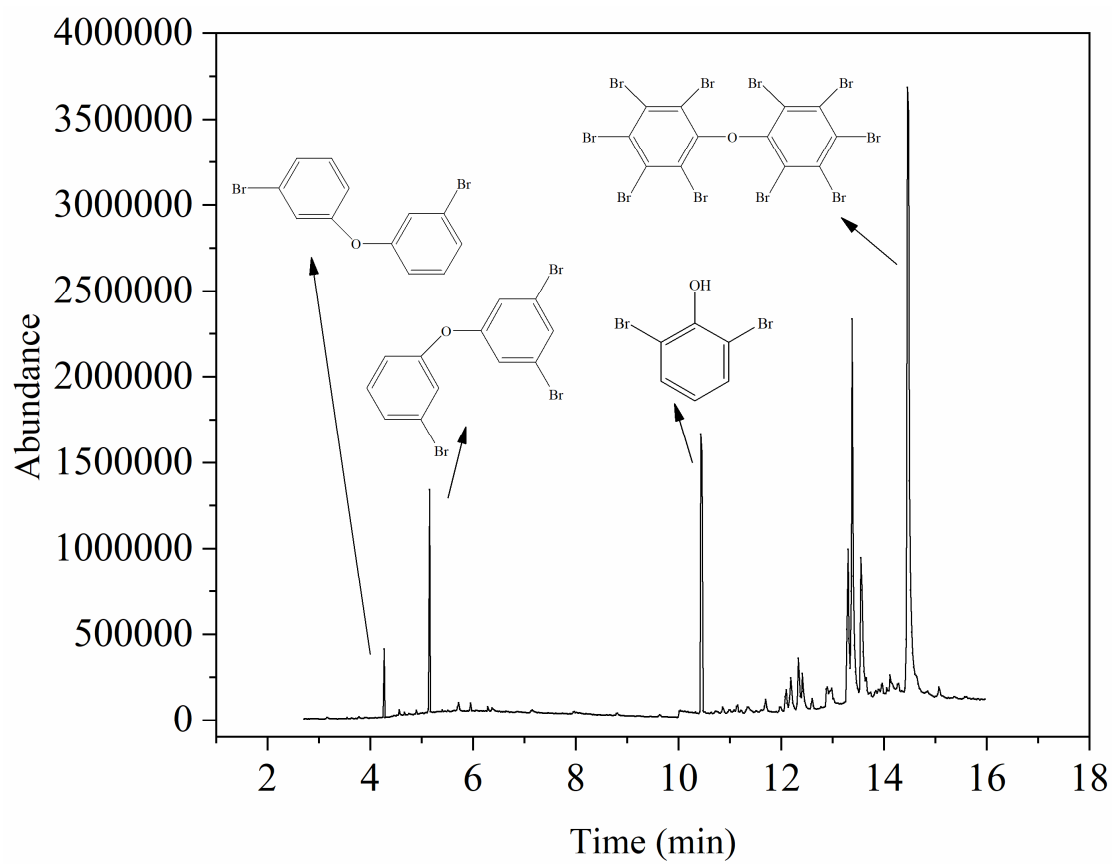


Figure S7. GC chromatogram of BDE 209 after 60 min ball milling time.

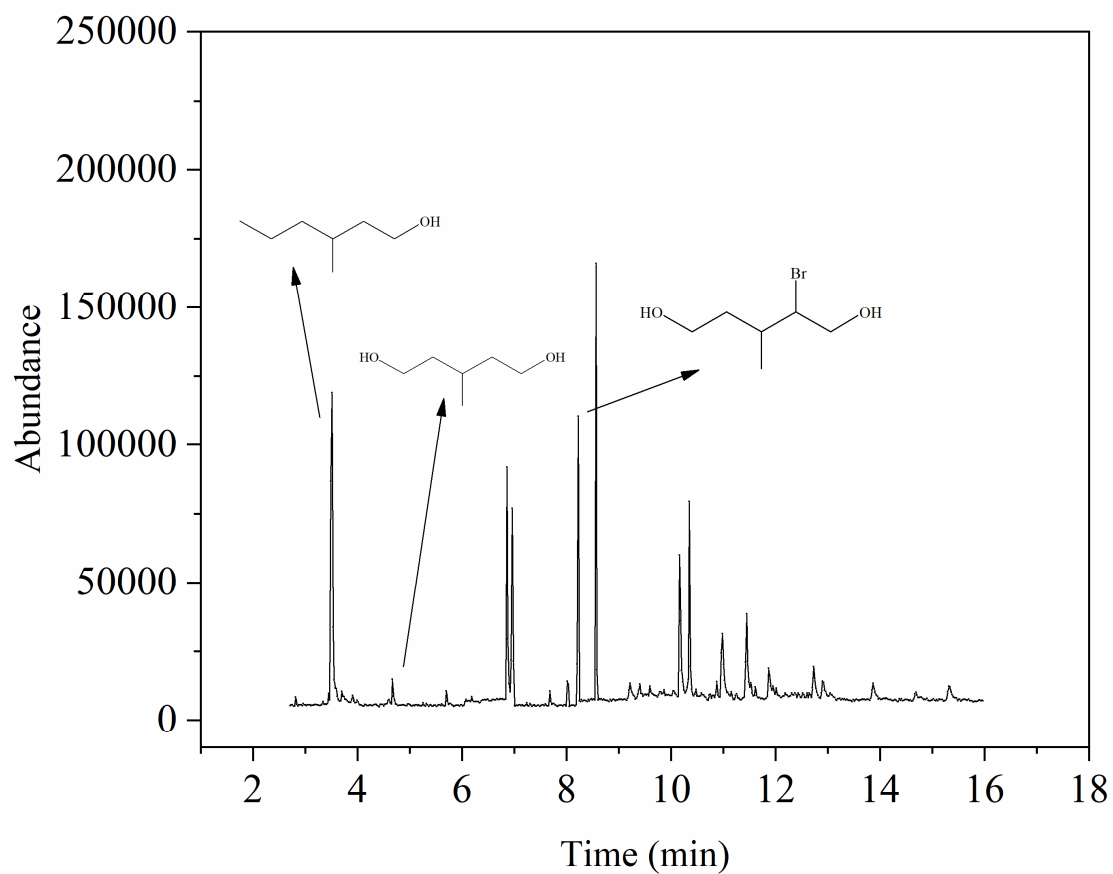


Figure S8. GC chromatogram of BDE 209 after 180 min ball milling time.

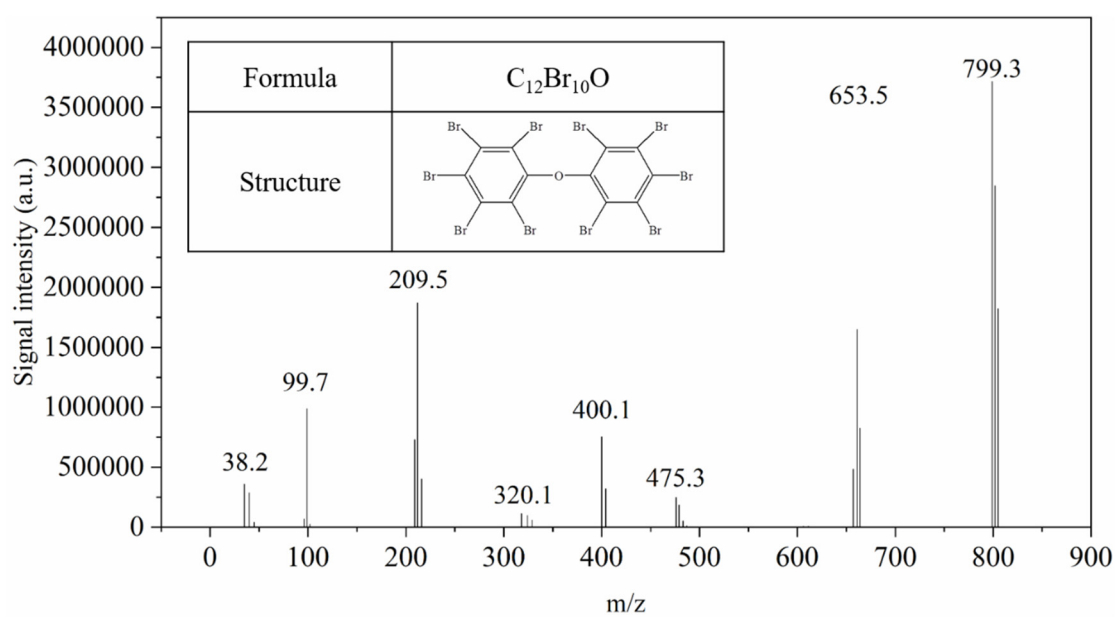


Figure S9. GC-MS spectrum of decabromodiphenyl ether.

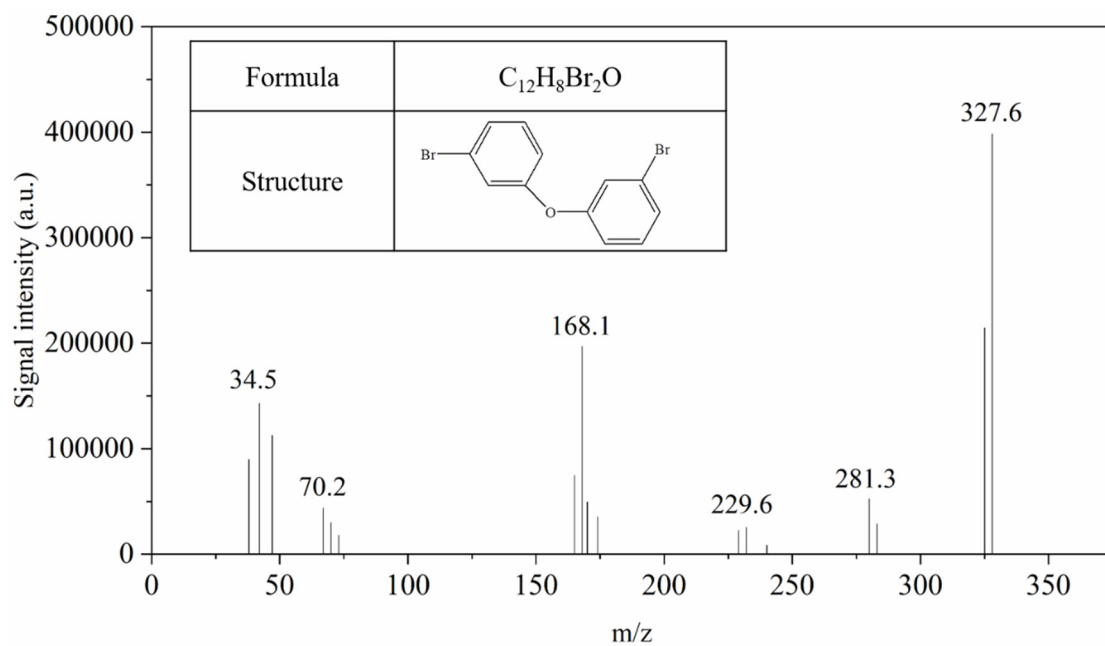


Figure S10. GC-MS spectrum of dibromodiphenyl ether (P1).

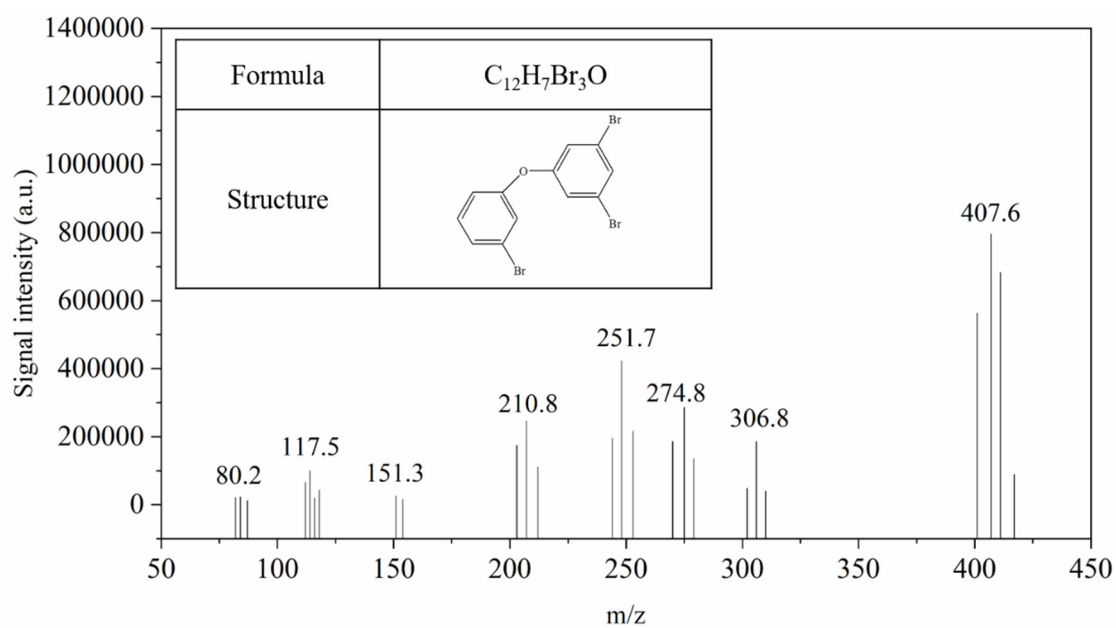


Figure S11. GC-MS spectrum of tribromodiphenyl ether (P2).

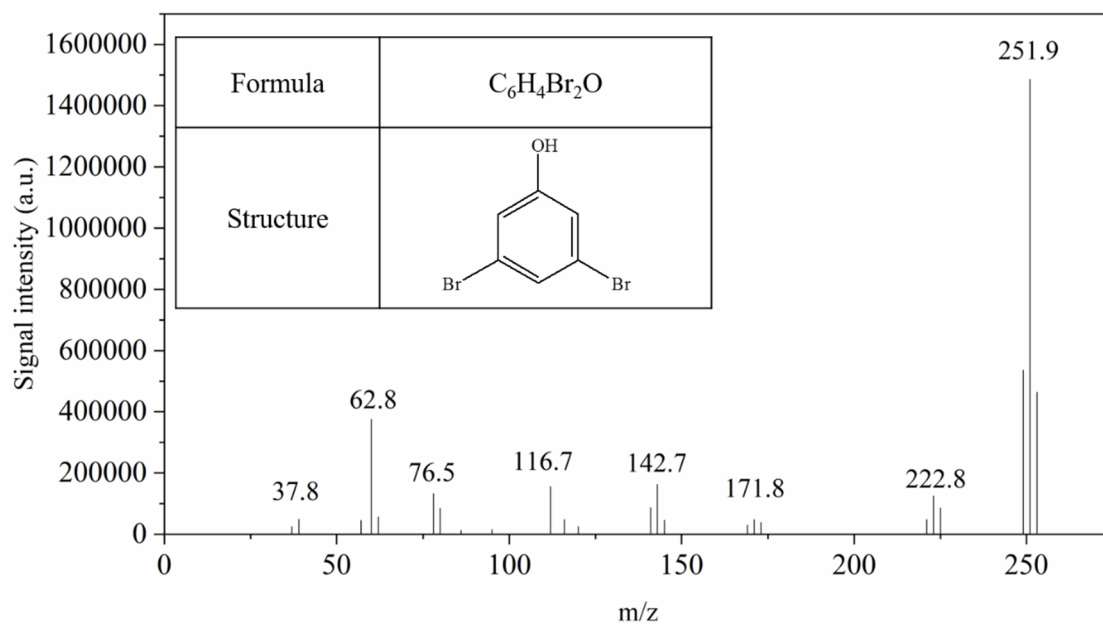


Figure S12. GC-MS spectrum of 3,5-dibromophenol (P5).

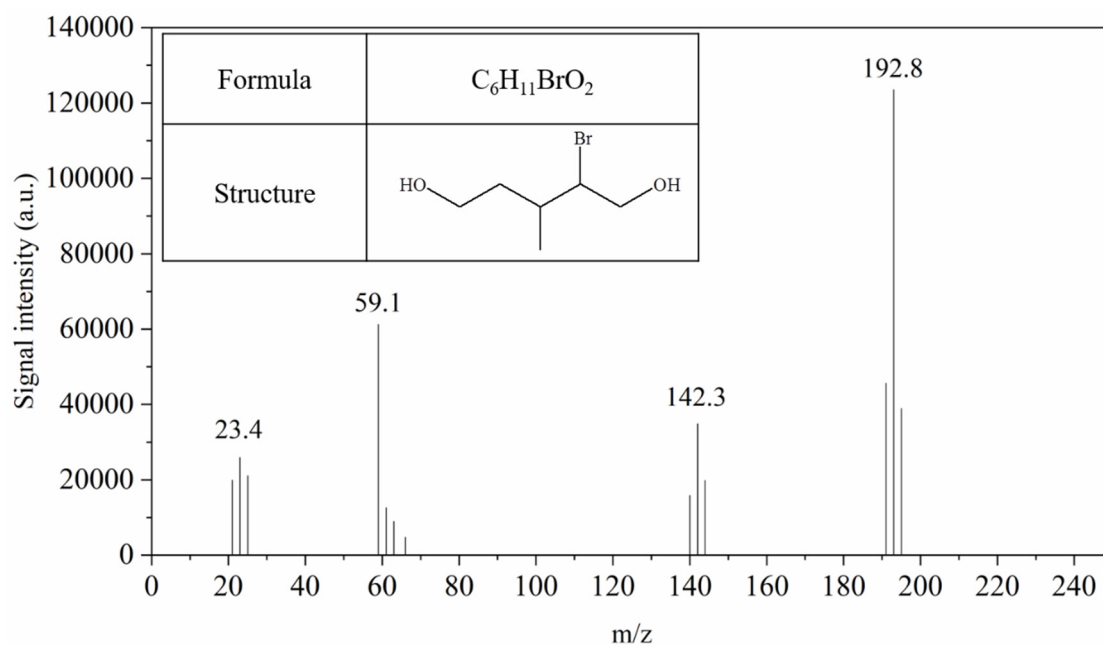


Figure S13. GC-MS spectrum of 2-bromo-3-methyl-hexane-1,5-diol (P6).

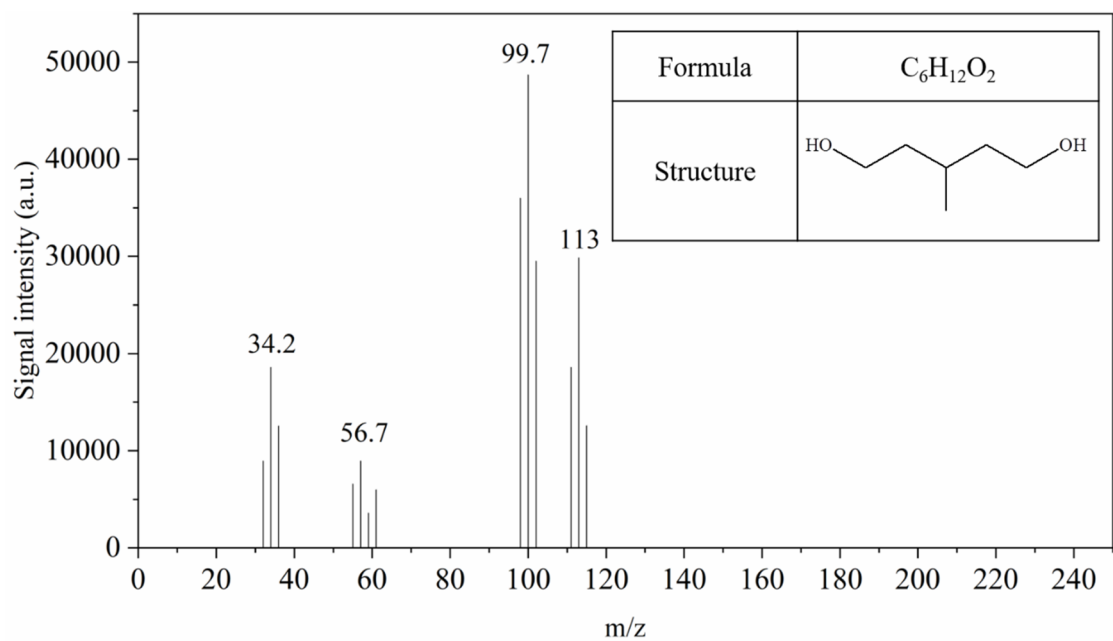


Figure S14. GC-MS spectrum of 3-methyl-1,5-hexanediol (P7).

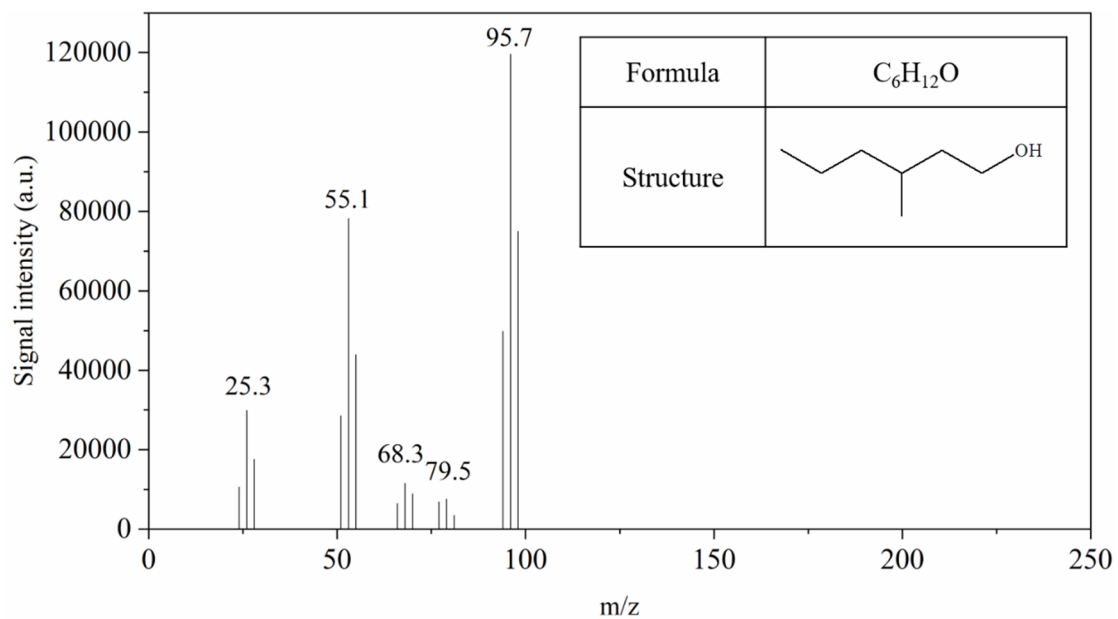


Figure S15. GC-MS spectrum of 3-methyl-1-hexanol (P8).