

Carbon Tetrachloride

Consider cyclohexane as an alternative.

Example of polymer synthesis that had higher yield with cyclohexane than  $\text{CCl}_4$ .

Femec, et al. Solvent replacement in the synthesis of persubstituted hydroquinone prepolymer materials. *Journal of Applied Polymer Science*. **1994**, 52, 501-505.

Methyl acetate is an alternative solvent for  $\alpha$ -bromination of mono and dimethyl aryl halides. The products yields are similar to those obtained with  $\text{CCl}_4$ , and with methyl acetate, no initiator is needed. The use of microwave irradiation will help reduce reaction times. In addition, aryl halides that are unresponsive in  $\text{CCl}_4$  can be brominated in methyl acetate and microwave assistance.

Amijs, C., van Kilnk, G., and van Koten, G. Carbon tetrachloride free benzylic brominations of methyl aryl halides. *Green Chemistry*. **2003**, 5(4), 470-474.

Benzotrifluoride can replace carbon tetrachloride as the solvent for many radical reactions and is a good replacement for carbon tetrachloride in Sharpless oxidation reactions of primary alcohols to carboxylic acids.

Maul, J. J.; Ostrowski, J.; Ublacker, G. A.; Linclau, B.; Curran, D. P. Benzotrifluoride and derivatives: useful solvents for organic synthesis and fluorous synthesis. *Topics in Current Chemistry*. **1999**, 206, 79-106.