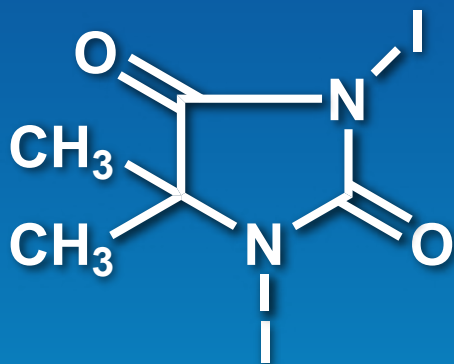


# Highly Effective Iodinating Reagent – DIH

## Advantages

- Higher Reactivity and Selectivity than Other Iodinating Reagents, such as I<sub>2</sub> or NIS
- By-Product can be Easily Removed by Aqueous Extraction

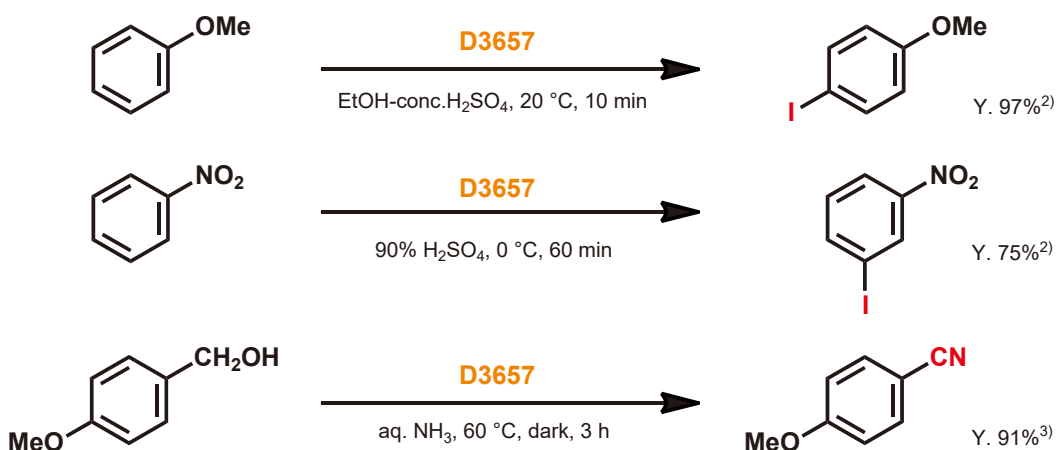


[D3657]

1,3-Diiodo-5,5-dimethylhydantoin (DIH) [D3657], which was first reported by Orazi *et al.*, is an useful iodinating reagent.<sup>1)</sup> D3657 reacts smoothly with aromatic compounds in the presence of sulfuric acid to give the corresponding iodinated products in high yields and high regioselectivities.<sup>2)</sup> In addition, direct conversion of alcohols and amines to the corresponding nitriles using D3657 also have been reported.<sup>3)</sup>

Furthermore, dimethylhydantoin, which is formed after the reaction, can easily be removed by aqueous extraction.

## Reaction Examples



- References 1) O. O. Orazi, R. A. Corral, H. E. Bertorello, *J. Org. Chem.* **1965**, 30, 1101.  
 2) V. K. Chaikovskii, V. D. Filimonov, A. A. Funk, V. I. Skorokhodov, V. D. Ogorodnikov, *Russ. J. Org. Chem.* **2007**, 43, 1291.  
 3) S. Iida, H. Togo, *Tetrahedron* **2007**, 63, 8274.

## 1,3-Diiodo-5,5-dimethylhydantoin (DIH)

5g / 25g [D3657]

For further information please refer to our website at [www.TCIchemicals.com](http://www.TCIchemicals.com).



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