

# Photochromism of 3H-2,1,4-benzoxadiazine 4-oxides with heterocyclic substituents on the benzene ring

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## Abstract

© 2017, Pleiades Publishing, Ltd. 2H-Benzimidazole 1,3-dioxides undergo thermal isomerization to 3H-2,1,4-benzoxadiazine 4-oxides which are converted to 2H-benzimidazole 1-oxides on further heating. Irradiation of 3H-2,1,4-benzoxadiazine 4-oxides with sunlight induces their transformation to 2H-benzimidazole 1,3-dioxides. 3H-2,1,4-Benzoxadiazine 4-oxides containing nucleophilic heterocyclic substituents are considerably more stable to sunlight, and they can be used as photochromic compounds.

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