Decomposition in aprotic solvents of

2,4-dihydroxy-7-methoxy-1,4-benzoxazin-3-one, a hydroxamic acid from cereals Bravo, Héctor R.

Niemeyer, Hermann M.

The decomposition of the title compound (DIMBOA, 1) in aprotic solvents was analysed in terms of linear solvation energy relationships using donor numbers. The results indicate rate-limiting cyclic hemiacetal opening in low donor number solvents and rate-limiting isocyanate formation in high donor number solvents. The addition of H2O to DIMBOA decomposing in high donor number solvents had no effect upon the reaction rate, allowing one of the two proposed mechanisms to be rejected. © 1985.