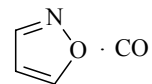


503  
MW $\text{C}_4\text{H}_3\text{NO}_2$ **Isoxazole – carbon monoxide (1/1)**  
(weakly bound complex) **$\text{C}_s$**   
(effective symmetry class)  
(large-amplitude motion)

$r_0$	$\text{\AA}^{\text{a}}$	$\theta_0$	$\text{deg}^{\text{a}}$
$R_{\text{cm}}$	4.528(5)	$\alpha^{\text{b}}$	2.7(5)
$\text{C}\equiv\text{O}$	1.118(2)	$\beta^{\text{c}}$	115.5(5)



Atom	$a_0 [\text{\AA}]$	$b_0 [\text{\AA}]$
N(1)	-0.2115	0.3372
O(2)	-1.3713	1.1173
C(3)	-2.4426	0.3089
C(4)	-2.0540	-0.9874
C(5)	-0.6312	-0.8984
H(3)	-3.4015	0.7910
H(4)	-2.6681	-1.8660
H(5)	0.0993	-1.6887
$^{13}\text{C}^{\text{d}}$	2.8510	-0.5470
$^{16}\text{O}^{\text{d}}$	3.4619	0.3894

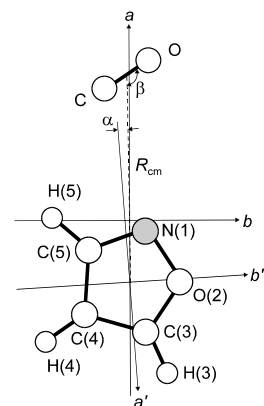
The complex is planar, with CO lying approximately radially away from nitrogen in the isoxazole ring.

<sup>a</sup>) Uncertainties were not estimated in the original paper.

<sup>b</sup>) Angle between  $R_{\text{cm}}$  and the  $a'$  axis.

<sup>c</sup>) Angle between  $R_{\text{cm}}$  and the molecular axis of the carbon monoxide molecule.

<sup>d</sup>) Carbon and oxygen atoms of the  $^{13}\text{C}^{16}\text{O}$  molecule.



The principal inertial axis system of the complex is denoted by  $a$  and  $b$ , and that of isoxazole by  $a'$  and  $b'$ .

McGlone, S., Bauder, A.: J. Chem. Phys. **109** (1998) 5383.