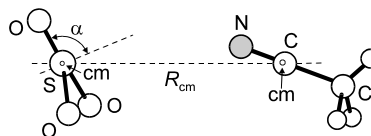


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MW $\text{C}_2\text{H}_3\text{NO}_3\text{S}$ **Acetonitrile – sulfur trioxide (1/1)**
(weakly bound complex) C_{3v}
(effective symmetry class)
(large-amplitude motion)
 $\text{H}_3\text{C}-\text{C}\equiv\text{N} \cdot \text{SO}_3$

r_0	\AA	θ_0	deg
N...S	2.466(16)	α^a	92.0(7)

The N...S distance is significantly shorter than the sum of van der Waals radii, and the structure is indicative of N...S dative bond which is in its early stage of development.



^a) Angle between the C_3 axis of SO_3 and the $\text{S}=\text{O}$ bond, see figure.

Burns, W.A., Phillips, J.A., Canagaratna, M., Goodfriend, H., Leopold, K.R.: J. Phys. Chem. A **103** (1999) 7445.

Replaces [II/25B\(3, 697\)](#)