

Integrated band strength of near-IR CH₄ bands in a CH₄:N₂=1:10 ice mixture at 16 K. The experimental procedure is described in Brunetto et al. (2008, ApJ 686, 1480). Please refer to this article when you use the values given below.

Peak ^a (cm ⁻¹)	Position (μm)	FWHM ^a (cm ⁻¹)	Mode ^b	Strength ^c , A (cm molecule ⁻¹)
2820.1	3.5460	15.5	$\nu_2+\nu_4$	3.38×10^{-19}
3013.9	3.3180	10.8	ν^3	saturated ^d
3848.8	2.5982	5.5	$3\nu_4$	– ^e
4121.8	2.4261	13.6	$\nu_2+2\nu_4$	– ^e
4207.8	2.3765	12.1	$\nu_1+\nu_4$	3.93×10^{-19}
4306.9	2.3219	15.4	$\nu_3+\nu_4$	7.12×10^{-19}
4535.9	2.2046	11.9	$\nu_2+\nu_3$	9.36×10^{-20}
5573.3	1.7943	13.1	$\nu_3+2\nu_4$	1.17×10^{-20}
5808.1	1.7217	16.6	$\nu_2+\nu_3+\nu_4$	3.01×10^{-20}
5996.4	1.6677	12.5	$2\nu_3$	4.62×10^{-20}

Note:

^a Errors on peak position and FWHM are of 0.5 cm⁻¹.

^b Mode identifications are after Quirico and Schmitt 1997, Icarus, 127, 354

^c Errors on band strengths are of the order of 5%-10%.

^d The 3010 cm⁻¹ band is saturated in our thick film spectra.

^e The feature is too weak to allow band strength calculations.