

Integrated band strength of near-IR CH₄ bands in a CH₄:N₂=10:1 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)
2816.2	3.5509	14.1	v ₂ +v ₄	2.43x10 ⁻¹⁹
3010.9	3.3213	9.3	v ³	saturated ^d
3848.1	2.5987	3.6	3v ₄	- ^e
4116.2	2.4294	14.4	v ₂ +2v ₄	- ^e
4204.6	2.3783	7.9	v ₁ +v ₄	3.38x10 ⁻¹⁹
4302.3	2.3243	12.7	v ₃ +v ₄	6.63x10 ⁻¹⁹
4530.4	2.2073	13.3	v ₂ +v ₃	5.30x10 ⁻²⁰
5567.3	1.7962	9.9	v ₃ +2v ₄	1.10x10 ⁻²⁰
5802.1	1.7235	11.1	v ₂ +v ₃ +v ₄	1.81x10 ⁻²⁰
5919.8	1.6892	9.1	-	- ^e
5990.9	1.6692	13.1	2v ₃	4.18x10 ⁻²⁰
7488.8	1.3353	13.2	v ₂ +2v ₃	8.90x10 ⁻²¹

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.