Table 1: Abundances of C-bearing molecules in interstellar ices, compared with the typical range seen in comets. All values are expressed as a percentage relative to H_2O-ice. Dashes indicate a current lack of information. Elias 16 is a background star that samples a quiescent dark-cloud environment, whereas NGC 7538 IRS9, W33A, GL 2136 and GL 2591 are embedded young stellar objects; all five objects are listed in a sequence from left to right of increasing thermal processing (as determined by decreasing solid CO abundance). 'XCN' is a CN-bonded molecule of uncertain identity; the cometary value for 'XCN' refers to HCN.

Species	Dark Cloud	— Embedded YSOs —				Comets
	Elias 16	NGC7538	W33A	GL2136	GL2591	
CH_3OH	<3	4	22	6	4	0.3–5
CH_4	—	2	2	—	—	0.2–1.2
H_2CO	—	—	—	7	—	0–5
CO (total)	25	16	9	2	<1	5–7
(polar)	3	2	7	2	—	—
(nonpolar)	22	14	2	—	—	—
CO_2 (total)	18	24	14	13	12	3–20
(polar)	18	16	13	10	8	—
(nonpolar)	—	8	1	3	4	—
'XCN'	<2	2	10	<0.5	—	0.02–0.1
HCOOH	—	3	—	—	—	0.05–0.1
OCS	—	—	0.3	—	—	—
C_2H_6	—	<0.5	—	—	—	0–2
CH_3CH_2OH	—	<1	—	—	—	—
T_{gas} (cold)	10K	26K	23K	17K	38K	—
(hot)	—	180K	120K	580K	1010K	—
References	1, 2	1, 3, 4	1, 4	1, 4	1, 4	5, 6, 7, 8

References: [1] Whittet (1997) and refs. therein. [2] Whittet *et al.* (1998). [3] Schutte *et al.* (1996). [4] Gerakines *et al.* (1999). [5] Mumma *et al.* (1993, 1996). [6] Crovisier *et al.* (1996). [7] Wink *et al.* (1998). [8] Irvine *et al.*, this volume.