

TABLE 17.1 Chain melting (phase transition) temperatures, T_c , of some common double-chained lipid bilayers in water (at pH 7) in order of increasing T_c

Lipid (giving number of carbons per chain)	Headgroup type ^a and chain melting temperature, ^b T_c (°C)				Melting point of <i>n</i> -alkane with same number of carbon atoms
	PC	PG ⁻	PS ⁻	PE	
<i>Saturated</i>					
Dilauroyl (12)	-2	0	13	30	-9.6
Dimyristoyl (14)	23	24	36	49	5.9
Dipalmitoyl (16)	41	41	52	64	18.2
Distearoyl (18)	55	55	68	74	28.2
<i>Unsaturated (cis)</i>					
Dioleoyl (18)	-22	-18	-7	-16	-30

^a PC: phosphatidylcholine (zwitterionic); PG⁻: phosphatidylglycerol (negatively charged); PS⁻: phosphatidylserine (negatively charged); PE: phosphatidylethanolamine (zwitterionic).

^b Compiled from Cevc and Marsh (1987) and Marsh (1990).