BAIN MUSC 525
Post-Tonal Music Theory

The Number of PC Sets

The formula for calculating the number of sets of cardinality *c* from *n* possible elements is:

$$\frac{n!}{(n-c)!}\cdot\frac{1}{c!}$$

c	**Set type name**	**Number of PC Sets**
0	∅ (empty set)	1
1	monad	12
2	dyads	66
3	trichords	220
4	tetrachords	495
5	pentachords	792
6	hexachords	924
7	septachords	792
8	octachords	495
9	nonachords	220
10	decachords	66
11	undecachords	12
12	***U*** (aggregate)	1
	TOTAL	4096

Source

Peter Castine, *Set Theory Objects: Abstractions for Computer-Aided Analysis and Composition of Serial and Atonal Music* (Berlin: Peter Lang, 1994), 63.