

Cambridge Structural Database
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CSD R-factor Statistics

The precision of crystal structure determinations is often assessed using the crystallographic R-factor, a measure of how well the structure factors computed using the refined structural model agree with structure factors given by the experimentally observed diffraction intensities. CSD structures with unreported R-factors often arise from short communications, and most frequently from the earlier literature.

R-factor range	No. in range	% CSD	Cumulative %
0.0100–0.0300	185,224	12.9	12.9
0.0301–0.0400	304,859	21.3	34.2
0.0401–0.0500	313,674	21.9	56.2
0.0501–0.0700	366,291	25.6	81.7
0.0701–0.0900	144,381	10.1	91.8
0.0901–0.1000	35,056	2.4	94.3
0.1001–0.1500	50,040	3.5	97.8
0.1501–	10,792	0.8	98.5
Not reported	21,030	1.5	100.0