

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	130,189	12.4	12.4
0.0301-0.0400	222,612	21.2	33.6
0.0401-0.0500	233,898	22.3	55.9
0.0501-0.0700	275,214	26.2	82.1
0.0701-0.0900	104,702	10.0	92.0
0.0901-0.1000	24,458	2.3	94.4
0.1001-0.1500	33,223	3.2	97.5
0.1501-	6,658	0.6	98.1
Not reported	19,462	1.9	100