

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	166,673	12.8	12.8
0.0301-0.0400	276,419	21.3	34.1
0.0401-0.0500	286,059	22.0	56.2
0.0501-0.0700	335,136	25.8	82.0
0.0701-0.0900	129,811	10.0	92.0
0.0901-0.1000	31,185	2.4	94.4
0.1001-0.1500	43,610	3.4	97.7
0.1501-	9,130	0.7	98.4
Not reported	20,423	1.6	100.0