

# CSD Product Datasheet 2025

## Commercial users

Choose the right level of CSD software access for your work.

We also offer a range of services from proprietary database building, to solid form risk assessment, virtual screening, and co-crystal design. Contact us to talk about your needs.

Not sure? We're happy to help. Email [admin@ccdc.cam.ac.uk](mailto:admin@ccdc.cam.ac.uk)

	CSD Core	CSD Discovery	CSD Materials	CSD Frameworks	CSD Enterprise	Add-on packages	
						CSD Theory	CSD Particle
<b>Data</b>							
CSD deposited and curated data	✓	✓	✓	✓	✓		
CSD teaching resources	✓	✓	✓	✓	✓		
Proprietary CSD extension	✓	✓	✓	✓	✓		
<b>Access</b>							
Retrieve via bibliographic info, DOI, CSD identifiers or compound name	✓	✓	✓	✓	✓		
Link from published articles and repositories	✓	✓	✓	✓	✓		
Publisher referee services	✓	✓	✓	✓	✓		
<b>Search</b>							
Search by chemical formula, cell parameters, 2D/3D substructure, similarity, and more...	✓	✓	✓	✓	✓		
Protein-ligand binding sites		✓			✓		
<b>Visualize</b>							
3D display and manipulation	✓	✓	✓	✓	✓		
High resolution graphics and movie generation	✓	✓	✓	✓	✓		
3D printing file output	✓	✓	✓	✓	✓		
PXRD pattern simulation	✓	✓	✓	✓	✓		
PXRD pattern comparison	✓	✓	✓	✓	✓		
Molecule and structure editing	✓	✓	✓	✓	✓		
2D diagram generation	✓	✓	✓	✓	✓		
<b>Editing and Analysing</b>							
Normalise Hydrogens	✓	✓	✓	✓	✓		
Transform Molecules	✓	✓	✓	✓	✓		
Invert Structure	✓	✓	✓	✓	✓		
Change symmetry, lattice centering, and unit cell	✓	✓	✓	✓	✓		
Sketch molecule		✓	✓	✓	✓		
SMILES to molecule		✓	✓	✓	✓		
Calculate void volume and properties	✓	✓	✓	✓	✓		
Pore analyser	✓	✓	✓	✓	✓		
Structure and molecule overlay	✓	✓	✓	✓	✓		

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<b>Analyse</b>							
Plotting and charting	✓	✓	✓	✓	✓		
Descriptive statistics	✓	✓	✓	✓	✓		
Interactive visualisation	✓	✓	✓	✓	✓		
Filtering and categorisation	✓	✓	✓	✓	✓		
Reporting	✓	✓	✓	✓	✓		
<b>Integrations</b>							
CSD Pipeline Pilot Component Collection	✓	✓	✓		✓		
CSD KNIME Component Collection	✓	✓	✓		✓		
<b>Conformations</b>							
Bond length assessment	✓	✓	✓		✓		
Valence angle assessment	✓	✓	✓		✓		
Torsion angle assessment	✓	✓	✓		✓		
Ring geometry assessment	✓	✓	✓		✓		
Conformer generation		✓	✓		✓		
<b>Interactions</b>							
Fragment interaction maps (IsoStar)	✓	✓	✓		✓		
Protein interaction maps (SuperStar)		✓			✓		
Full interaction maps		✓	✓		✓		
<b>Ligand-based drug discovery</b>							
Ligand overlay		✓			✓		
Field-based ligand screener		✓			✓		
Scaffold hopping		✓			✓		
<b>Structure-based drug discovery</b>							
Protein-ligand docking		✓			✓		
Ensemble docking		✓			✓		
Pose analysis		✓			✓		
Proprietary structures		✓			✓		
Cavity similarity searching		✓			✓		

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<b>Solid Form Analysis</b>							
Motif searching			✓	✓	✓		
Packing feature searching			✓	✓	✓		
Crystal packing similarity			✓	✓	✓		
Calculations			✓		✓		
Hydrogen bond propensity and coordination assessment			✓		✓		
Hydrate analysis			✓	✓	✓		
Solvate analysis			✓	✓	✓		
Aromatic analysis			✓		✓		
Co-crystal design			✓		✓		
Hydrogen bond statistics assessment			✓		✓		
<b>Particle Analysis</b>							
Predict particle facets							✓
Visualize surface chemistry and charge							✓
Identify slip planes							✓
Surface interactions analysis							✓
Full interaction maps on surface							✓
Determine H-bond dimensionality							✓
Visualize surface topology							✓
Quantify surface chemistry and topology							✓
Python API particle analysis							✓
<b>Manage Crystal Structure Prediction (CSP) data</b>							
Manage proprietary CSP data						✓	
View and analyse CSP results in a web-based interface						✓	
Generate CSP landscapes						✓	
Generate CSP landscape reports in 1 click						✓	
Store CSP data in a standardized way						✓	
Python API access to CSP data						✓	
Search for structures within Crystal Structure Prediction (CSP) landscapes, as well as searching for landscapes themselves						✓	
Predict solid forms using informatics, landscape generator						✓	