



## 5. Molymod Spares

Spare Molymod parts. The full range of spares are available, please contact us if you require any other parts.

Code	Description	Pack	Price
MA11010	Hydrogen 1 hole white	10	£2.41
MA405	Silicon grey	10	£4.29
MA101	Halogen chlorine green	10	£3.05
MA20010	Oxygen 2 hole red	10	£3.48
MA301	Phosphorous purple	10	£4.30
MA30010	Nitrogen 3 hole blue	10	£4.10
MA122	Nitrogen blue 1 hole	10	£3.07
MA401	Nitrogen blue 109 tetrahedral 4 hole	10	£4.29
MA40010	Carbon 4 hole black	10	£4.10
MA310	Carbon Sp <sup>2</sup> black 120 trigonal	10	£4.29
TBA244	Short white link compact bonds	25	£3.02
ML1225	Medium grey single bond links	25	£3.40
ML1325	Long grey flexible multibond links	25	£3.59
ML11	Medium purple link	25	£3.40

## 1. Molymod Molecular & Atomic Orbital Collection Sets

This set contains sufficient parts to make the organic model shown.

Code	Description	Pack	Price
MOK404	Benzene C <sub>6</sub> H <sub>6</sub> - hybridised model	Each	£16.50
MOK405	Benzene C <sub>6</sub> H <sub>6</sub> - unhybridised model	Each	£11.56

## 2. Molymod Molecular Orbital Organic Structures Set

Molymod 4 model collection set consisting of: benzene, ethane, ethene & ethyne. This set contains sufficient parts to make the 4 organic molecular orbital models. The models show: sigma bonding orbitals, pi bonding orbitals, concept of hybridisation and delocalisation.

Contents:

12 carbon & 18 hydrogen atoms, 9 carbon-carbon (oval shaped) sigma bonds, 18 carbon-hydrogen (pear shaped) sigma bonds, & 9 pi-bonds (21 pink and 21 purple pieces).

Code	Pack	Price
MOS9004	Each	£13.02

## 3. Molymod Molyorbital 14 Model Collection Set

This set contains sufficient parts to make 14 easy to self-assemble atomic orbitals.

Pink and purple coloured pear shaped lobes represent the two wave phases, positive and negative of the p and d atomic orbitals. The atomic nuclei are represented by opaque white spheres. Each model comes with its own individual colourless transparent base for display purposes. Approximate model heights including base are: s-orbital 5cm, p-orbital 9cm, d-orbital 8cm.

Code	Pack	Price
MOS90114	Each	£23.99

## 4. Molymod Molyorbital 8 Model Collection Set

This set contains sufficient parts to make the eight atomic models shown in the photograph. The different shapes are examples of the orientations of the bonds and cover coordination numbers 1 to 6. Lone pairs are represented by brown spheres or brown pear shaped parts. The 2 extra pear shaped parts are included in the set to enable protonated models to be made. e.g. acid/base theory, the formation of H<sub>3</sub>O<sup>+</sup> as a result of the migration of H<sup>+</sup> from hydrogen chloride.

Models included:

- Coordination 1. Hydrogen chloride HCl - linear
- Coordination 2. Beryllium chloride BeCl<sub>2</sub> - linear
- Coordination 3. Water H<sub>2</sub>O - bent
- Coordination 4. Boron trihydride BH<sub>3</sub> - trigonal planar
- Coordination 5. Ammonia NH<sub>3</sub> - pyramidal
- Coordination 6. Methane CH<sub>4</sub> - tetrahedral
- Coordination 7. Phosphorus pentachloride PCl<sub>5</sub> - trigonal bipyramidal
- Coordination 8. Sulphur hexafluoride SF<sub>6</sub> - octahedral

Code	Pack	Price
MOS9028	Each	£13.43