

## 1. Molymod Molecular & Atomic Orbital Collection Sets

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

| Code          | Description                           | Pack | Price         |
|---------------|---------------------------------------|------|---------------|
| <b>MOK404</b> | Benzene $C_6H_6$ - hybridised model   | Each | <b>£16.49</b> |
| <b>MOK405</b> | Benzene $C_6H_6$ - unhybridised model | Each | <b>£11.56</b> |

## 2. Molymod Molecular Orbital Organic Structures Set

Molyorbital 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         |
|----------------|------|---------------|
| <b>MOS9004</b> | Each | <b>£24.58</b> |

## 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         |
|-----------------|------|---------------|
| <b>MOS90114</b> | Each | <b>£23.98</b> |

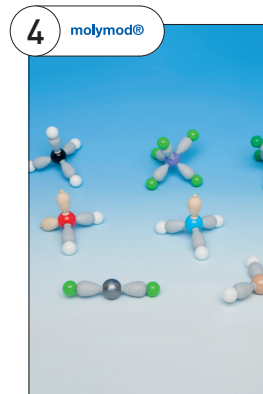
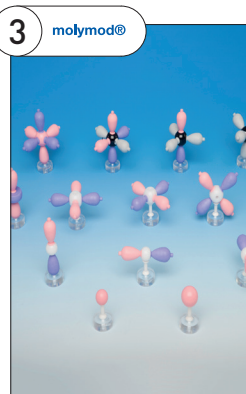
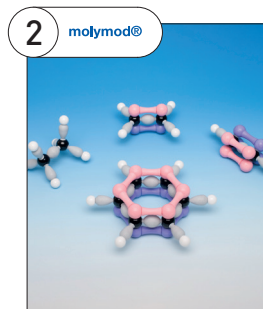
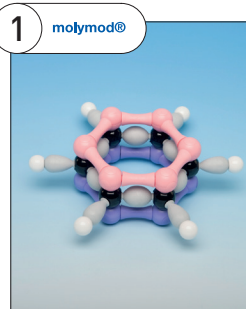
## 4. Molymod Molyorbital 8 Model Collection Set

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  $H_3O^+$  as a result of the migration of  $H^+$  from hydrogen chloride.

Models included:

- Coordination 1. Hydrogen chloride HCl - linear
- Coordination 2. Beryllium chloride  $BeCl_2$  - linear
- Coordination 3. Water  $H_2O$  - bent
- Coordination 4. Boron trihydride  $BH_3$  - trigonal planar
- Coordination 5. Ammonia  $NH_3$  - pyramidal
- Coordination 6. Methane  $CH_4$  - tetrahedral
- Coordination 7. Phosphorus pentachloride  $PCl_5$  - trigonal bipyramidal
- Coordination 8. Sulphur hexafluoride  $SF_6$  - octahedral

| Code           | Pack | Price         |
|----------------|------|---------------|
| <b>MOS9028</b> | Each | <b>£13.43</b> |



## 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        |
|----------------|--------------------------------------|------|--------------|
| <b>MA11010</b> | Hydrogen 1 hole white                | 10   | <b>£2.40</b> |
| <b>MA405</b>   | Silicon grey                         | 10   | <b>£4.29</b> |
| <b>MA101</b>   | Halogen chlorine green               | 10   | <b>£3.04</b> |
| <b>MA20010</b> | Oxygen 2 hole red                    | 10   | <b>£3.48</b> |
| <b>MA301</b>   | Phosphorous purple                   | 10   | <b>£4.30</b> |
| <b>MA30010</b> | Nitrogen 3 hole blue                 | 10   | <b>£4.10</b> |
| <b>MA122</b>   | Nitrogen blue 1 hole                 | 10   | <b>£3.52</b> |
| <b>MA401</b>   | Nitrogen blue 109 tetrahedral 4 hole | 10   | <b>£4.29</b> |
| <b>MA40010</b> | Carbon 4 hole black                  | 10   | <b>£4.10</b> |
| <b>MA310</b>   | Carbon Sp2 black 120 trigonal        | 10   | <b>£4.29</b> |
| <b>TBA244</b>  | Short white link compact bonds       | 25   | <b>£3.01</b> |
| <b>ML1225</b>  | Medium grey single bond links        | 25   | <b>£3.39</b> |
| <b>ML1325</b>  | Long grey flexible multibond links   | 25   | <b>£3.58</b> |
| <b>ML11</b>    | Medium purple link                   | 25   | <b>£3.39</b> |