

**C07 ORGANIC CHEMISTRY** (such compounds as the oxides, sulfides, or oxysulfides of carbon, cyanogen, phosgene, hydrocyanic acid or salts thereof C01; products obtained from layered base-exchange silicates by ion-exchange with organic compounds such as ammonium, phosphonium or sulfonium compounds or by intercalation of organic compounds C01B 33/44; macromolecular compounds C08; dyes C09; fermentation products C12; fermentation or enzyme-using processes to synthesise a desired chemical compound or composition or to separate optical isomers from a racemic mixture C12P; production of organic compounds by electrolysis or electrophoresis C25B 3/00, C25B 7/00) [2]

**C07F ACYCLIC, CARBOCYCLIC, OR HETEROCYCLIC COMPOUNDS CONTAINING ELEMENTS OTHER THAN CARBON, HYDROGEN, HALOGEN, OXYGEN, NITROGEN, SULFUR, SELENIUM, OR TELLURIUM** (metal-containing porphyrins C07D 487/22)

- (1) Attention is drawn to Note (3) after class C07, which defines the last place priority rule applied in the range of subclasses C07C C07K and within these subclasses. [8]
- (2) Attention is drawn to Note (6) following the title of class C07. [2]
- (3) Therapeutic activity of compounds is further classified in subclass A61P. [7]
- (4) In this subclass, organic acid salts, alcoholates, phenates, chelates or mercaptides are classified as the parent compounds. [2]

|             |                                                                                              |             |                                                                                                                        |
|-------------|----------------------------------------------------------------------------------------------|-------------|------------------------------------------------------------------------------------------------------------------------|
| <b>1/00</b> | <b>Compounds containing elements of the 1st Group of the Periodic System</b>                 | 7/21        | . . Cyclic compounds having at least one ring containing silicon but no carbon in the ring [2]                         |
| 1/02        | . Lithium compounds                                                                          | 7/22        | . Tin compounds                                                                                                        |
| 1/04        | . Sodium compounds                                                                           | 7/24        | . Lead compounds                                                                                                       |
| 1/06        | . Potassium compounds                                                                        | 7/26        | . . Tetra-alkyl lead compounds                                                                                         |
| 1/08        | . Copper compounds                                                                           | 7/28        | . Titanium compounds                                                                                                   |
| 1/10        | . Silver compounds                                                                           | 7/30        | . Germanium compounds [2]                                                                                              |
| 1/12        | . Gold compounds                                                                             |             |                                                                                                                        |
| <b>3/00</b> | <b>Compounds containing elements of the 2nd Group of the Periodic System</b>                 | <b>9/00</b> | <b>Compounds containing elements of the 5th Group of the Periodic System</b>                                           |
| 3/02        | . Magnesium compounds                                                                        | 9/02        | . Phosphorus compounds (sugar phosphates C07H 11/04; nucleotides C07H 19/00, C07H 21/00; nucleic acids C07H 21/00) [2] |
| 3/04        | . Calcium compounds                                                                          | 9/04        | . . Reaction products of phosphorus sulfur compounds with hydrocarbons                                                 |
| 3/06        | . Zinc compounds                                                                             | 9/06        | . . without P—C bonds                                                                                                  |
| 3/08        | . Cadmium compounds                                                                          | 9/08        | . . . Esters of oxyacids of phosphorus                                                                                 |
| 3/10        | . Mercury compounds                                                                          | 9/09        | . . . . Esters of phosphoric acids [2]                                                                                 |
| 3/12        | . . Aromatic substances containing mercury                                                   | 9/10        | . . . . . Phosphatides, e.g. lecithin                                                                                  |
| 3/14        | . . Heterocyclic substances containing mercury                                               | 9/11        | . . . . . with hydroxyalkyl compounds without further substituents on alkyl [2]                                        |
| <b>5/00</b> | <b>Compounds containing elements of the 3rd Group of the Periodic System</b>                 | 9/113       | . . . . . with unsaturated acyclic alcohols [2]                                                                        |
| 5/02        | . Boron compounds                                                                            | 9/117       | . . . . . with cycloaliphatic alcohols [2]                                                                             |
| 5/04        | . . Esters of boric acids                                                                    | 9/12        | . . . . . with hydroxyaryl compounds [2]                                                                               |
| 5/05        | . . Cyclic compounds having at least one ring containing boron but no carbon in the ring [2] | 9/14        | . . . . . containing P-halide groups [2]                                                                               |
| 5/06        | . Aluminium compounds                                                                        | 9/141       | . . . . . Esters of phosphorous acids [2]                                                                              |
| <b>7/00</b> | <b>Compounds containing elements of the 4th Group of the Periodic System</b>                 | 9/142       | . . . . . with hydroxyalkyl compounds without further substituents on alkyl [2]                                        |
| 7/02        | . Silicon compounds                                                                          | 9/143       | . . . . . with unsaturated acyclic alcohols [2]                                                                        |
| 7/04        | . . Esters of silicic acids                                                                  | 9/144       | . . . . . with cycloaliphatic alcohols [2]                                                                             |
| 7/06        | . . . with hydroxyaryl compounds                                                             | 9/145       | . . . . . with hydroxyaryl compounds [2]                                                                               |
| 7/07        | . . . Cyclic esters [2]                                                                      | 9/146       | . . . . . containing P-halide groups [2]                                                                               |
| 7/08        | . . Compounds having one or more C—Si linkages                                               | 9/16        | . . . Esters of thiophosphoric acids or thiophosphorous acids                                                          |
| 7/10        | . . . containing nitrogen                                                                    | 9/165       | . . . . Esters of thiophosphoric acids [2]                                                                             |
| 7/12        | . . . Organo silicon halides                                                                 | 9/17        | . . . . . with hydroxyalkyl compounds without further substituents on alkyl [2]                                        |
| 7/14        | . . . . Preparation thereof from halogenated silanes and hydrocarbons                        | 9/173       | . . . . . with unsaturated acyclic alcohols [2]                                                                        |
| 7/16        | . . . . Preparation thereof from silicon and halogenated hydrocarbons                        | 9/177       | . . . . . with cycloaliphatic alcohols [2]                                                                             |
| 7/18        | . . . Compounds having one or more C—Si linkages as well as one or more C—O—Si linkages      | 9/18        | . . . . . with hydroxyaryl compounds [2]                                                                               |
| 7/20        | . . . Purification; Separation                                                               | 9/20        | . . . . . containing P-halide groups [2]                                                                               |
|             |                                                                                              | 9/201       | . . . . . Esters of thiophosphorous acids [2]                                                                          |

- 9/202 . . . . . with hydroxyalkyl compounds without further substituents on alkyl [2]
- 9/203 . . . . . with unsaturated acyclic alcohols [2]
- 9/204 . . . . . with cycloaliphatic alcohols [2]
- 9/205 . . . . . with hydroxyaryl compounds [2]
- 9/206 . . . . . containing P-halide groups [2]
- 9/22 . . . Amides of acids of phosphorus
- 9/24 . . . . Esteramides
- 9/26 . . . . containing P-halide groups
- 9/28 . . with one or more P-C bonds
- 9/30 . . . Phosphinic acids ( $R_2=P(O)OH$ ); Thiophosphinic acids
- 9/32 . . . . Esters thereof
- 9/34 . . . . Halides thereof
- 9/36 . . . . Amides thereof
- 9/38 . . . Phosphonic acids ( $R-P(O)(OH)_2$ ); Thiophosphonic acids
- 9/40 . . . . Esters thereof
- 9/42 . . . . Halides thereof
- 9/44 . . . . Amides thereof
- 9/46 . . . Phosphinous acids ( $R_2=P-OH$ ); Thiophosphinous acids
- 9/48 . . . Phosphonous acids ( $R-P(OH)_2$ ); Thiophosphonous acids
- 9/50 . . . Organo-phosphines
- 9/52 . . . . Halophosphines
- 9/53 . . . . Organo-phosphine oxides; Organo-phosphine sulfides [2]
- 9/535 . . . Organo-phosphoranes [3]
- 9/54 . . . Quaternary phosphonium compounds
- 9/547 . . Heterocyclic compounds, e.g. containing phosphorus as a ring hetero atom [5]
- 9/553 . . . having one nitrogen atom as the only ring hetero atom [5]
- 9/564 . . . . Three-membered rings [5]
- 9/568 . . . . Four-membered rings [5]
- 9/572 . . . . Five-membered rings [5]
- 9/576 . . . . Six-membered rings [5]
- 9/58 . . . . . Pyridine rings [5]
- 9/59 . . . . . Hydrogenated pyridine rings [5]
- 9/60 . . . . . Quinoline or hydrogenated quinoline ring systems [5]
- 9/62 . . . . . Isoquinoline or hydrogenated isoquinoline ring systems [5]
- 9/64 . . . . . Acridine or hydrogenated acridine ring systems [5]
- 9/645 . . . having two nitrogen atoms as the only ring hetero atoms [5]
- 9/6503 . . . . Five-membered rings [5]
- 9/6506 . . . . . having the nitrogen atoms in positions 1 and 3 [5]
- 9/6509 . . . . Six-membered rings [5]
- 9/6512 . . . . . having the nitrogen atoms in positions 1 and 3 [5]
- 9/6515 . . . having three nitrogen atoms as the only ring hetero atoms [5]
- 9/6518 . . . . Five-membered rings [5]
- 9/6521 . . . . Six-membered rings [5]
- 9/6524 . . . having four or more nitrogen atoms as the only ring hetero atoms [5]
- 9/6527 . . . having nitrogen and oxygen atoms as the only ring hetero atoms [5]
- 9/653 . . . . Five-membered rings [5]
- 9/6533 . . . . Six-membered rings [5]
- 9/6536 . . . having nitrogen and sulfur atoms with or without oxygen atoms, as the only ring hetero atoms [5]
- 9/6539 . . . . Five-membered rings [5]
- 9/6541 . . . . . condensed with carbocyclic rings or ring systems [5]
- 9/6544 . . . . Six-membered rings [5]
- 9/6547 . . . . . condensed with carbocyclic rings or ring systems [5]
- 9/655 . . . having oxygen atoms, with or without sulfur, selenium, or tellurium atoms, as the only ring hetero atoms [5]
- 9/6553 . . . having sulfur atoms, with or without selenium or tellurium atoms, as the only ring hetero atoms [5]
- 9/6558 . . . containing at least two different or differently substituted hetero rings neither condensed among themselves nor condensed with a common carbocyclic ring or ring system [5]
- 9/6561 . . . containing systems of two or more relevant hetero rings condensed among themselves or condensed with a common carbocyclic ring or ring system, with or without other non-condensed hetero rings [5]
- 9/6564 . . . having phosphorus atoms, with or without nitrogen, oxygen, sulfur, selenium or tellurium atoms, as ring hetero atoms [5]
- 9/6568 . . . . having phosphorus atoms as the only ring hetero atoms [5]
- 9/6571 . . . . having phosphorus and oxygen atoms as the only ring hetero atoms [5]
- 9/6574 . . . . . Esters of oxyacids of phosphorus [5]
- 9/6578 . . . . having phosphorus and sulfur atoms with or without oxygen atoms, as ring hetero atoms [5]
- 9/6581 . . . . having phosphorus and nitrogen atoms with or without oxygen or sulfur atoms, as ring hetero atoms [5]
- 9/6584 . . . . . having one phosphorus atom as ring hetero atom [5]
- 9/6587 . . . . . having two phosphorus atoms as ring hetero atoms [5]
- 9/659 . . . . . having three phosphorus atoms as ring hetero atoms [5]
- 9/6593 . . . . . 1,3,5-Triaza-2,4,6-triphosphorines [5]
- 9/6596 . . . having atoms other than oxygen, sulfur, selenium, tellurium, nitrogen or phosphorus as ring hetero atoms [5]
- 9/66 . Arsenic compounds
- 9/68 . . without As-C bonds
- 9/70 . . Organo-arsenic compounds
- 9/72 . . . Aliphatic compounds
- 9/74 . . . Aromatic compounds
- 9/76 . . . . containing hydroxyl groups
- 9/78 . . . . containing amino groups
- 9/80 . . . Heterocyclic compounds
- 9/82 . . . . Arsenic compounds containing one or more pyridine rings
- 9/84 . . . . Arsenic compounds containing one or more quinoline ring systems
- 9/86 . . . . Arsenic compounds containing one or more isoquinoline ring systems
- 9/88 . . . . Arsenic compounds containing one or more acridine ring systems
- 9/90 . Antimony compounds

|              |                                                                              |              |                                                                                           |
|--------------|------------------------------------------------------------------------------|--------------|-------------------------------------------------------------------------------------------|
| 9/92         | . . . Aromatic compounds                                                     | 15/03        | . . . Sideramines; The corresponding desferri compounds                                   |
| 9/94         | . . . Bismuth compounds                                                      | 15/04        | . . . Nickel compounds                                                                    |
| <b>11/00</b> | <b>Compounds containing elements of the 6th Group of the Periodic System</b> | 15/06        | . . . Cobalt compounds                                                                    |
| <b>13/00</b> | <b>Compounds containing elements of the 7th Group of the Periodic System</b> | <b>17/00</b> | <b>Metallocenes [2]</b>                                                                   |
| <b>15/00</b> | <b>Compounds containing elements of the 8th Group of the Periodic System</b> | 17/02        | . . . of metals of the iron group or the platinum group [2]                               |
| 15/02        | . . . Iron compounds                                                         | <b>19/00</b> | <b>Metal compounds according to more than one of main groups C07F 1/00 C07F 17/00 [5]</b> |