

## SECTION A — HUMAN NECESSITIES

## A01 AGRICULTURE; FORESTRY; ANIMAL HUSBANDRY; HUNTING; TRAPPING; FISHING

**A01N PRESERVATION OF BODIES OF HUMANS OR ANIMALS OR PLANTS OR PARTS THEREOF** (preservation of food or foodstuff A23); **BIOCIDES, e.g. AS DISINFECTANTS, AS PESTICIDES OR AS HERBICIDES** (preparations for medical, dental or toilet purposes which kill or prevent the growth or proliferation of unwanted organisms A61K); **PEST REPELLANTS OR ATTRACTANTS; PLANT GROWTH REGULATORS** (mixtures of pesticides with fertilisers C05G)

**Note(s)**

- This subclass covers:
  - compositions, physical forms, methods of application of specific materials or the use of single compounds or compositions;
  - chemosterilants for the sexual sterilisation of invertebrates, e.g. insects (sex sterilants for other purposes A61K).
- This subclass does not cover materials which affect the growth of a plant solely by supplying nutrients, i.e. plant food, ordinarily required for growth or materials which are used to prevent or cure mineral deficiencies in plants, e.g. addition of iron chelates to cure iron chlorosis, which materials are covered by class C05.
- In this subclass, the following expression is used with the meaning indicated:
  - "plant growth regulators" are those materials which alter the plant through a chemical modification of the plant metabolism, such as auxins.
- Biocidal, pest repellent, pest attractant or plant growth regulatory activity of compounds or preparations is further classified in subclass A01P.

**Subclass index**

PRESERVATION OF CORPSES OF HUMANS OR ANIMALS, OR OF PLANTS.....	1/00, 3/00
BIOCIDES, PEST REPELLANTS OR ATTRACTANTS, PLANT GROWTH REGULATORS	
Physical form or method of application.....	25/00
containing organic compounds.....	27/00-57/00, 61/00
containing inorganic compounds.....	59/00
containing micro-organisms, enzymes, extracts of animals or plants.....	63/00, 65/00

**Preservation of bodies of humans or animals, or plants, or parts thereof**

- 1/00 Preservation of bodies of humans or animals, or parts thereof**
- 1/02 • Preservation of living parts
- 3/00 Preservation of plants or parts thereof, e.g. inhibiting evaporation, improvement of the appearance of leaves** (preservation or chemical ripening of harvested fruit or vegetables A23B 7/00); **Grafting wax**
- 3/02 • Keeping cut flowers fresh chemically (apparatus therefor A01G 5/06)
- 3/04 • Grafting wax

**Biocides; Pest repellants or attractants; Plant growth regulators [3]****Note(s)**

- Attention is drawn to the definitions of groups of chemical elements following the title of section C.
- In groups A01N 27/00-A01N 65/00, in the absence of an indication to the contrary, an active ingredient is classified in the last appropriate place.

- A composition, i.e. a mixture of two or more active ingredients is classified in the last of groups A01N 27/00-A01N 65/00 that provides for at least one of these active ingredients.
- Any part of a composition which is not identified by the classification according to Note (3), and which itself is determined to be novel and non-obvious, must also be classified in the last appropriate place in groups A01N 27/00-A01N 65/00. The part can be either a single ingredient or a composition in itself.
- Any part of a composition which is not identified by the classification according to Note (3) or (4), and which is considered to represent information of interest for search, may also be classified in the last appropriate place in groups A01N 27/00-A01N 65/00. This can, for example, be the case when it is considered of interest to enable searching of compositions using a combination of classification symbols. Such non-obligatory classification should be given as "additional information".
- Where a compound is described as existing in tautomeric forms, it is classified as if existing in the form which is classified last in the system.

7. Compounds covered by different main groups according to alternatively specified parts of their formulae are classified in every one of the relevant main groups.
8. Salts formed between two or more organic compounds are classified as the compound providing the essential ion and it is also classified as the compound providing the other ion.
9. Salts or metal chelates of an organic compound are classified as that compound.
10. In this subclass, a foodstuff is not considered as an active ingredient.
11. Different materials applied in sequence, at different times, are considered as a mixture of all materials employed.
12. Synergistic or potentiated compositions are classified as if the synergist or potentiator were an active ingredient.
13. In groups A01N 25/00-A01N 65/00, the symbol X means nitrogen, oxygen, sulfur or a halogen; Y means nitrogen, oxygen or sulfur. A dotted line between atoms indicates an optional bond, e.g. ... indicates one or two single bonds or a double bond.
- 25/00 Biocides, pest repellants or attractants, or plant growth regulators, characterised by their forms, or by their non-active ingredients or by their methods of application** (fungicidal, bactericidal, insecticidal, disinfecting or antiseptic paper D21H); **Substances for reducing the noxious effect of the active ingredients to organisms other than pests [3]**
- 25/02 • containing liquids as carriers, diluents or solvents [3]
- 25/04 • • Dispersions or gels (foams A01N 25/16) [3]
- 25/06 • • • Aerosols [3]
- 25/08 • containing solids as carriers or diluents [3]
- 25/10 • • Macromolecular compounds [3]
- 25/12 • Powders or granules (A01N 25/26 takes precedence) [3]
- 25/14 • • wettable [3]
- 25/16 • Foams [3]
- 25/18 • Vapour or smoke emitting compositions with delayed or sustained release [3]
- 25/20 • Combustible or heat-generating compositions [3]
- 25/22 • containing ingredients stabilising the active ingredients [3]
- 25/24 • containing ingredients to enhance the sticking of the active ingredients [3]
- 25/26 • in coated particulate form [3]
- 25/28 • • Microcapsules [3]
- 25/30 • characterised by the surfactants [3]
- 25/32 • Ingredients for reducing the noxious effect of the active substances to organisms other than pests, e.g. toxicity reducing compositions, self-destructing compositions [3]
- 25/34 • Shaped forms, e.g. sheets, not provided for in any other group of this main group [3]
- 27/00 Biocides, pest repellants or attractants, or plant growth regulators containing hydrocarbons [3]**
- 29/00 Biocides, pest repellants or attractants, or plant growth regulators containing halogenated hydrocarbons [3]**
- 29/02 • Acyclic compounds or compounds containing halogen attached to an aliphatic side chain of a cycloaliphatic ring system [3]
- 29/04 • Halogen directly attached to a carbocyclic ring system [3]
- 29/06 • • Hexachlorocyclohexane [3]
- 29/08 • • Halogen directly attached to a polycyclic ring system [3]
- 29/10 • Halogen attached to an aliphatic side chain of an aromatic ring system [3]
- 29/12 • • 1,1-Di- or 1,1,1-tri-halo-2-aryl-ethane or -ethene or derivatives thereof, e.g. DDT [3]
- 31/00 Biocides, pest repellants or attractants, or plant growth regulators containing organic oxygen or sulfur compounds [3]**
- 31/02 • Acyclic compounds [3]
- 31/04 • Oxygen or sulfur attached to an aliphatic side chain of a carbocyclic ring system [3]
- 31/06 • Oxygen or sulfur directly attached to a cycloaliphatic ring system [3]
- 31/08 • Oxygen or sulfur directly attached to an aromatic ring system [3]
- 31/10 • • Pentachlorophenol [3]
- 31/12 • • Bis-chlorophenols [3]
- 31/14 • • Ethers [3]
- 31/16 • • with two or more oxygen or sulfur atoms directly attached to the same aromatic ring system [3]
- 33/00 Biocides, pest repellants or attractants, or plant growth regulators containing organic nitrogen compounds [3]**
- 33/02 • Amines; Quaternary ammonium compounds [3]
- 33/04 • • Nitrogen directly attached to aliphatic or cycloaliphatic carbon atoms [3]
- 33/06 • • Nitrogen directly attached to an aromatic ring system [3]
- 33/08 • • containing oxygen or sulfur [3]
- 33/10 • • • having at least one oxygen or sulfur atom directly attached to an aromatic ring system [3]
- 33/12 • • Quaternary ammonium compounds [3]
- 33/14 • containing nitrogen-to-halogen bonds [3]
- 33/16 • containing nitrogen-to-oxygen bonds [3]
- 33/18 • • Nitro compounds [3]
- 33/20 • • • containing oxygen or sulfur attached to the carbon skeleton containing the nitro group [3]
- 33/22 • • • • having at least one oxygen or sulfur atom and at least one nitro group directly attached to the same aromatic ring system [3]
- 33/24 • • only one oxygen atom attached to the nitrogen atom [3]
- 33/26 • containing nitrogen-to-nitrogen bonds, e.g. azides, diazo-amino compounds, diazonium compounds, hydrazine derivatives [3]
- 35/00 Biocides, pest repellants or attractants, or plant growth regulators containing organic compounds containing a carbon atom having two bonds to hetero atoms with at the most one bond to halogen, e.g. aldehyde radical [3]**
- 35/02 • containing aliphatically bound aldehyde or keto groups, or thio-analogues thereof; Derivatives thereof, e.g. acetals [3]
- 35/04 • containing aldehyde or keto groups, or thio-analogues thereof, directly attached to an aromatic ring system, e.g. acetophenone; Derivatives thereof, e.g. acetals [3]
- 35/06 • containing keto or thioketo groups as part of a ring, e.g. cyclohexanone, quinone; Derivatives thereof, e.g. ketals [3]
- 35/08 • at least one of the bonds to hetero atoms is to nitrogen [3]

- 35/10 • • containing a carbon-to-nitrogen double bond [3]
- 37/00 Biocides, pest repellants or attractants, or plant growth regulators containing organic compounds containing a carbon atom having three bonds to hetero atoms with at the most two bonds to halogen, e.g. carboxylic acids** (containing cyclopropane carboxylic acids or derivatives thereof, e.g. cyclopropane carboxylic acid nitriles, A01N 53/00) [3]
- 37/02 • Saturated carboxylic acids or thio-analogues thereof; Derivatives thereof [3]
- 37/04 • • polybasic [3]
- 37/06 • Unsaturated carboxylic acids or thio-analogues thereof; Derivatives thereof [3]
- 37/08 • containing carboxylic groups or thio-analogues thereof, directly attached by the carbon atom to a cycloaliphatic ring; Derivatives thereof [3]
- 37/10 • Aromatic or araliphatic carboxylic acids, or thio-analogues thereof; Derivatives thereof [3]
- 37/12 • containing the group  $\text{-CO-O-C}\equiv\text{C}_n\text{Y}$ , wherein  $\text{C}_n$  means a carbon skeleton not containing a ring; Thio-analogues thereof [3]
- 37/14 • containing the group  $\text{-CO-O-C}\equiv\text{X}$ ; Thio-analogues thereof [3]
- 37/16 • containing the group  $\text{-CO-O-Y}$ ; Thio-analogues thereof [3]
- 37/18 • containing the group  $\text{-CO-N}$ , e.g. carboxylic acid amides or imides; Thio-analogues thereof [3]
- 37/20 • • containing the group  $\text{-CO-N-C}\equiv\text{C}_n\text{Y}$ , wherein  $\text{C}_n$  means a carbon skeleton not containing a ring; Thio-analogues thereof [3]
- 37/22 • • the nitrogen atom being directly attached to an aromatic ring system, e.g. anilides [3]
- 37/24 • • • containing at least one oxygen or sulfur atom being directly attached to the same aromatic ring system [3]
- 37/26 • • containing the group  $\text{-CO-N-C}\equiv\text{X}$ ; Thio-analogues thereof [3]
- 37/28 • • containing the group  $\text{-CO-N=X}$ ; Thio-analogues thereof [3]
- 37/30 • • containing the groups  $\text{-CO-N}$  and  $\text{-C}\equiv\text{X}$  both being directly attached by their carbon atoms to the same carbon skeleton, e.g.  $\text{H}_2\text{N-NH-CO-C}_6\text{H}_4\text{-COOCH}_3$ ; Thio-analogues thereof [3]
- 37/32 • • Cyclic imides of polybasic carboxylic acids or thio-analogues thereof [3]
- 37/34 • Nitriles [3]
- 37/36 • containing at least one carboxylic group or a thio-analogue, or a derivative thereof, and a singly bound oxygen or sulfur atom attached to the same carbon skeleton, this oxygen or sulfur atom not being a member of a carboxylic group or of a thio-analogue, or of a derivative thereof, e.g. hydroxy-carboxylic acids [3]
- 37/38 • • having at least one oxygen or sulfur atom attached to an aromatic ring system [3]
- 37/40 • • • having at least one carboxylic group or a thio-analogue, or a derivative thereof, and one oxygen or sulfur atom attached to the same aromatic ring system [3]
- 37/42 • containing within the same carbon skeleton a carboxylic group or a thio-analogue, or a derivative thereof, and a carbon atom having only two bonds to hetero atoms with at the most one bond to halogen, e.g. keto-carboxylic acids [3]
- 37/44 • containing at least one carboxylic group or a thio-analogue, or a derivative thereof, and a nitrogen atom attached to the same carbon skeleton by a single or double bond, this nitrogen atom not being a member of a derivative or of a thio-analogue of a carboxylic group, e.g. amino-carboxylic acids [3]
- 37/46 • • N-acyl derivatives [3]
- 37/48 • • Nitro-carboxylic acids; Derivatives thereof [3]
- 37/50 • • the nitrogen atom being doubly bound to the carbon skeleton [3]
- 37/52 • containing  $\text{X-C=N-}$  groups, e.g. carboxylic acid amidines [3]
- 39/00 Biocides, pest repellants or attractants, or plant growth regulators containing aryloxy- or arylthio-aliphatic or cycloaliphatic compounds, containing the group  $\text{Ar-O-C}_n\text{Y}$  or  $\text{Ar-S-C}_n\text{Y}$ , e.g. phenoxyethylamine, phenylthio-acetonitrile, phenoxyacetone** [3]
- Note(s)**
- In this group, the symbol  $\text{C}_n$  means a carbon skeleton, not containing an aromatic ring system wherein  $n \geq 2$ .
- 39/02 • Aryloxy-carboxylic acids; Derivatives thereof [3]
- 39/04 • • Aryloxy-acetic acids; Derivatives thereof [3]
- 41/00 Biocides, pest repellants or attractants, or plant growth regulators containing organic compounds containing a sulfur atom bound to a hetero atom** [3]
- 41/02 • containing a sulfur-to-oxygen double bond [3]
- 41/04 • • Sulfonic acids; Derivatives thereof [3]
- 41/06 • • • Sulfonic acid amides [3]
- 41/08 • • • Sulfonic acid halides; alpha-Hydroxy-sulfonic acids; Amino-sulfonic acids; Thiosulfonic acids; Derivatives thereof [3]
- 41/10 • • Sulfones; Sulfoxides [3]
- 41/12 • not containing sulfur-to-oxygen bonds, e.g. polysulfides [3]
- 43/00 Biocides, pest repellants or attractants, or plant growth regulators containing heterocyclic compounds** (containing cyclic anhydrides, cyclic imides A01N 37/00; containing compounds of the formula  $\text{X}_m\text{C}_n\text{N}\langle\text{C}\rangle$ , containing only one heterocyclic ring, wherein  $m \geq 1$  and  $n \geq 0$  and  $\text{-N}\langle\text{C}\rangle$  is unsubstituted or alkylsubstituted pyrrolidine, piperidine, morpholine, thiomorpholine, piperazine or a polymethyleneimine with four or more  $\text{CH}_2$  groups A01N 33/00-A01N 41/12; containing cyclopropane carboxylic acids or derivatives thereof, e.g. esters having heterocyclic rings, A01N 53/00) [3]
- Note(s)**
- In this group, the following terms or expressions are used with the meanings indicated:
    - "hetero ring" is a ring having at least one halogen, nitrogen, oxygen or sulfur atom as a ring member;
    - "bridged" means the presence of at least one fusion other than ortho, peri and spiro;

- two rings are "condensed" if they share at least one ring member, i.e. "spiro" and "bridged" are considered as condensed;
  - "condensed ring system" is a ring system in which all rings are condensed among themselves.
2. In this group, the number of rings in a condensed ring system equals the number of scissions necessary to convert the ring system into one acyclic chain. The relevant rings in a condensed system are chosen according to the following criteria consecutively:
- i. lowest number of ring members,
  - ii. highest number of hetero atoms as ring members.
- Ring members shared by two or more rings are regarded as being a member of each of these rings.
- 43/02 • having rings with one or more oxygen or sulfur atoms as the only ring hetero atom [3]
- 43/04 • • with one hetero atom [3]
- 43/06 • • • five-membered rings [3]
- 43/08 • • • • with oxygen as the ring hetero atom [3]
- 43/10 • • • • with sulfur as the ring hetero atom [3]
- 43/12 • • • • condensed with a carbocyclic ring [3]
- 43/14 • • • six-membered rings [3]
- 43/16 • • • • with oxygen as the ring hetero atom [3]
- 43/18 • • • • with sulfur as the ring hetero atom [3]
- 43/20 • • • three- or four-membered rings [3]
- 43/22 • • • rings with more than six members [3]
- 43/24 • • with two or more hetero atoms [3]
- 43/26 • • • five-membered rings [3]
- 43/28 • • • • with two hetero atoms in positions 1,3 [3]
- 43/30 • • • • • with two oxygen atoms in positions 1,3, condensed with a carbocyclic ring [3]
- 43/32 • • • six-membered rings [3]
- 43/34 • having rings with one nitrogen atom as the only ring hetero atom [3]
- 43/36 • • five-membered rings [3]
- 43/38 • • • condensed with carbocyclic rings [3]
- 43/40 • • six-membered rings [3]
- 43/42 • • • condensed with carbocyclic rings [3]
- 43/44 • • three- or four-membered rings [3]
- 43/46 • • rings with more than six members [3]
- 43/48 • having rings with two nitrogen atoms as the only ring hetero atoms [3]
- 43/50 • • 1,3-Diazoles; Hydrogenated 1,3-diazoles [3]
- 43/52 • • • condensed with carbocyclic rings, e.g. benzimidazoles [3]
- 43/54 • • 1,3-Diazines; Hydrogenated 1,3-diazines [3]
- 43/56 • • 1,2-Diazoles; Hydrogenated 1,2-diazoles [3]
- 43/58 • • 1,2-Diazines; Hydrogenated 1,2-diazines [3]
- 43/60 • • 1,4-Diazines; Hydrogenated 1,4-diazines [3]
- 43/62 • • three- or four-membered rings or rings with more than six members [3]
- 43/64 • having rings with three nitrogen atoms as the only ring hetero atoms [3, 4]
- 43/647 • • Triazoles; Hydrogenated triazoles [4]
- 43/653 • • • 1,2,4-Triazoles; Hydrogenated 1,2,4-triazoles [4]
- 43/66 • • 1,3,5-Triazines, not hydrogenated and not substituted at the ring nitrogen atoms [3]
- 43/68 • • • with two or three nitrogen atoms directly attached to ring carbon atoms [3]
- 43/70 • • • • Diamino-1,3,5-triazines with only one oxygen, sulfur or halogen atom or only one cyano, thiocyno ( $-\text{SCN}$ ), cyanato ( $-\text{OCN}$ ) or azido ( $-\text{N}_3$ ) group directly attached to a ring carbon atom [3]
- 43/707 • • 1,2,3- or 1,2,4-Triazines; Hydrogenated 1,2,3- or 1,2,4-triazines [4]
- 43/713 • having rings with four or more nitrogen atoms as the only ring hetero atoms [4]
- 43/72 • having rings with nitrogen atoms and oxygen or sulfur atoms, as ring hetero atoms [3]
- 43/74 • • five-membered rings with one nitrogen atom and either one oxygen atom or one sulfur atom in positions 1,3 [3]
- 43/76 • • • 1,3-Oxazoles; Hydrogenated 1,3-oxazoles [3]
- 43/78 • • • 1,3-Thiazoles; Hydrogenated 1,3-thiazoles [3]
- 43/80 • • five-membered rings with one nitrogen atom and either one oxygen atom or one sulfur atom in positions 1,2 [3]
- 43/82 • • five-membered rings with three hetero atoms [3]
- 43/824 • • • 1,3,4-Oxa(thia)diazoles; Hydrogenated 1,3,4-oxa(thia)diazoles [6]
- 43/828 • • • 1,2,3-Oxa(thia)diazoles; Hydrogenated 1,2,3-oxa(thia)diazoles [6]
- 43/832 • • • 1,2,5-Oxa(thia)diazoles; Hydrogenated 1,2,5-oxa(thia)diazoles [6]
- 43/836 • • • 1,2,4-Oxa(thia)diazoles; Hydrogenated 1,2,4-oxa(thia)diazoles [6]
- 43/84 • • six-membered rings with one nitrogen atom and either one oxygen atom or one sulfur atom in positions 1,4 [3]
- 43/86 • • six-membered rings with one nitrogen atom and either one oxygen atom or one sulfur atom in positions 1,3 [3]
- 43/88 • • six-membered rings with three ring hetero atoms [3]
- 43/90 • having two or more relevant hetero rings, condensed among themselves or with a common carbocyclic ring system [3]
- 43/92 • having rings with one or more halogen atoms as ring hetero atoms [3]
- 45/00 Biocides, pest repellants or attractants, or plant growth regulators containing compounds having three or more carbocyclic rings condensed among themselves, at least one ring not being a six-membered ring (halogenated hydrocarbons A01N 29/08; condensed with heterocyclic rings A01N 43/00) [3]**
- 45/02 • having three carbocyclic rings [3]
- 47/00 Biocides, pest repellants or attractants, or plant growth regulators containing organic compounds containing a carbon atom not being member of a ring and having no bond to a carbon or hydrogen atom, e.g. derivatives of carbonic acid (carbon tetrahalides A01N 29/02) [3]**
- 47/02 • the carbon atom having no bond to a nitrogen atom [3]
- 47/04 • • containing  $:\text{N}-\text{S}-\text{C}\equiv\text{Hal}_3$  groups [3]
- 47/06 • • containing  $-\text{O}-\text{CO}-\text{O}-$  groups; Thio-analogues thereof [3]
- 47/08 • the carbon atom having one or more single bonds to nitrogen atoms [3]
- 47/10 • • Carbamic acid derivatives, i.e. containing the group  $-\text{O}-\text{CO}-\text{N}$ ; Thio-analogues thereof [3]

- 47/12 • • • containing a —O—CO—N< group, or a thio-analogue thereof, neither directly attached to a ring nor the nitrogen atom being a member of a heterocyclic ring [3]
- 47/14 • • • • Di-thio-analogues thereof [3]
- 47/16 • • • • the nitrogen atom being part of a heterocyclic ring [3]
- 47/18 • • • containing a —O—CO—N< group, or a thio-analogue thereof, directly attached to a heterocyclic or cycloaliphatic ring [3]
- 47/20 • • • N-Aryl derivatives thereof [3]
- 47/22 • • • O-Aryl or S-Aryl esters thereof [3]
- 47/24 • • • containing the groups  $\begin{array}{c} \text{X} \\ \vdots \\ \text{O}-\text{CO}-\text{N} \\ \vdots \\ \text{O} \end{array}$  or  $\begin{array}{c} \text{X} \\ \vdots \\ \text{O}-\text{CO}-\text{N} \\ \vdots \\ \text{S} \\ \vdots \\ \text{O} \end{array}$ ; Thio-analogues thereof [3]
- 47/26 • • • Oxidation products of dithiocarbamic acid derivatives, e.g. thiuram sulfides [3]
- 47/28 • • Ureas or thioureas containing the groups >N—CO—N< or >N—CS—N< (isoureas, isothioureas A01N 47/42) [3]
- 47/30 • • • Derivatives containing the group >N—CO—N—aryl or >N—CS—N—aryl [3]
- 47/32 • • • containing >N—CO—N< or >N—CS—N< groups directly attached to a cycloaliphatic ring [3]
- 47/34 • • • containing the groups  $\begin{array}{c} \text{N} \\ \vdots \\ \text{CO}-\text{N}-\text{CO}- \\ \vdots \\ \text{N} \end{array}$ ,  $\begin{array}{c} \text{N} \\ \vdots \\ \text{CO}-\text{N}-\text{C}-\text{O}- \\ \vdots \\ \text{N} \end{array}$ ,  $\begin{array}{c} \text{N} \\ \vdots \\ \text{CO}-\text{N}=\text{S}- \\ \vdots \\ \text{N} \end{array}$ ,  $\begin{array}{c} \text{N} \\ \vdots \\ \text{CO}-\text{N}=\text{N}- \\ \vdots \\ \text{N} \end{array}$  or  $\begin{array}{c} \text{N} \\ \vdots \\ \text{CO}-\text{N}-\text{C}-\text{N} \\ \vdots \\ \text{N} \end{array}$ , e.g. biuret; Thio-analogues thereof; Urea-aldehyde condensation products [3]
- 47/36 • • • containing the group >N—CO—N< directly attached to at least one heterocyclic ring; Thio-analogues thereof [3]
- 47/38 • • • containing the group >N—CO—N< where at least one nitrogen atom is part of a heterocyclic ring; Thio-analogues thereof [3]
- 47/40 • the carbon atom having a double or triple bond to nitrogen, e.g. cyanates, cyanamides (inorganic cyanamides A01N 59/24) [3]
- 47/42 • • containing —N=CX<sub>2</sub> groups, e.g. isothiourea [3]
- 47/44 • • • Guanidine; Derivatives thereof [3]
- 47/46 • • containing —N=C=S groups [3]
- 47/48 • • containing —S—C≡N groups (A01N 43/00-A01N 47/38 take precedence) [3]
- 49/00 Biocides, pest repellants or attractants, or plant growth regulators containing compounds containing**
- $\begin{array}{c} \text{C} \\ \vdots \\ \text{C}^*-\text{C}^*-\text{C}^* \\ \vdots \quad \vdots \\ \text{X} \quad \text{X} \end{array}$
- the group **wherein m+n≥1, both X together may also mean —Y— or a direct carbon-to-carbon bond, and the carbon atoms marked with an asterisk are not part of any ring system other than that which may be formed by the atoms X, the carbon atoms in square brackets being part of any acyclic or cyclic structure, or the group**
- $\begin{array}{c} \text{A} \quad \text{C} \\ \vdots \quad \vdots \\ \text{C}=\text{C}^*-\text{C}^*-\text{C}^*-\text{C}^* \\ \vdots \quad \vdots \quad \vdots \quad \vdots \\ \text{C} \quad \text{C} \end{array}$
- wherein A means a carbon atom or Y, n ≥ 0, and not more than one of these carbon atoms being a member of the same ring system, e.g. juvenile insect hormones or mimics thereof (containing hydrocarbons A01N 27/00) [3]**
- 51/00 Biocides, pest repellants or attractants, or plant growth regulators containing organic compounds having the sequences of atoms O—N—S, X—O—S, N—N—S, O—N—N or O-halogen, regardless of the number of bonds each atom has and with no atom of these sequences forming part of a heterocyclic ring [3]**
- 53/00 Biocides, pest repellants or attractants, or plant growth regulators containing cyclopropane carboxylic acids or derivatives thereof [3]**
- $\begin{array}{c} \text{C} \\ \vdots \\ \text{C}^*-\text{C}^*-\text{C}^* \\ \vdots \quad \vdots \\ \text{C} \end{array}$
- 53/02 • Esters containing the group  $\begin{array}{c} \text{C} \\ \vdots \\ \text{C}^*-\text{C}^*-\text{CO}-\text{O}-\text{C}^* \\ \vdots \quad \vdots \\ \text{C} \end{array}$ , wherein the carbon atom marked with an asterisk is acyclic or part of a ring or ring system; Thio-analogues thereof [6]
- 53/04 • • having heterocyclic rings [6]
- 53/06 • • the carbon atom marked with an asterisk being acyclic and directly bound to a carbon atom of a six-membered aromatic ring, e.g. benzyl esters; Thio-analogues thereof [6]
- 53/08 • • • with aryloxy groups bound to the six-membered aromatic ring, e.g. phenoxybenzyl esters; Thio-analogues thereof [6]
- 53/10 • • Esters not provided for in groups A01N 53/04 or A01N 53/06 [6]
- $\begin{array}{c} \text{C} \\ \vdots \\ \text{C}^*-\text{C}^*-\text{C}^* \\ \vdots \quad \vdots \\ \text{C} \end{array}$
- 53/12 • Compounds containing the group  $\begin{array}{c} \text{C} \\ \vdots \\ \text{C}^*-\text{C}^*-\text{C}^* \\ \vdots \quad \vdots \\ \text{C} \end{array}$ , or Y being a nitrogen atom, e.g. cyclopropane carboxylic acid amides [6]
- 53/14 • Cyclopropane carboxylic acid nitriles [6]
- 55/00 Biocides, pest repellants or attractants, or plant growth regulators containing organic compounds containing elements other than carbon, hydrogen, halogen, oxygen, nitrogen and sulfur (containing organo-phosphorus compounds A01N 57/00) [3]**
- 55/02 • containing metal atoms [3]
- 55/04 • • Tin [3]
- 55/06 • • Mercury [3]
- 55/08 • containing boron [3]
- 55/10 • containing silicon [6]
- 57/00 Biocides, pest repellants or attractants, or plant growth regulators containing organic phosphorus compounds [3]**
- 57/02 • having alternatively specified atoms bound to the phosphorus atom and not covered by a single one of groups A01N 57/10, A01N 57/18, A01N 57/26, A01N 57/34 [3]
- 57/04 • • containing acyclic or cycloaliphatic radicals [3]
- 57/06 • • containing aromatic radicals [3]
- 57/08 • • containing heterocyclic radicals [3]
- 57/10 • having phosphorus-to-oxygen bonds or phosphorus-to-sulfur bonds (A01N 57/02 takes precedence) [3]
- 57/12 • • containing acyclic or cycloaliphatic radicals [3]
- 57/14 • • containing aromatic radicals [3]
- 57/16 • • containing heterocyclic radicals [3]
- 57/18 • having phosphorus-to-carbon bonds (A01N 57/02 takes precedence) [3]
- 57/20 • • containing acyclic or cycloaliphatic radicals [3]
- 57/22 • • containing aromatic radicals [3]
- 57/24 • • containing heterocyclic radicals [3]
- 57/26 • having phosphorus-to-nitrogen bonds (A01N 57/02 takes precedence) [3]
- 57/28 • • containing acyclic or cycloaliphatic radicals [3]

**A01N**

- 57/30 • • containing aromatic radicals [3]
- 57/32 • • containing heterocyclic radicals [3]
- 57/34 • having phosphorus-to-halogen bonds; Phosphonium salts [3]
- 57/36 • having phosphorus as a ring member [3]
- 59/00 Biocides, pest repellants or attractants, or plant growth regulators containing elements or inorganic compounds [3]**
- 59/02 • Sulfur; Selenium; Tellurium; Compounds thereof [3]
- 59/04 • Carbon disulfide; Carbon monoxide; Carbon dioxide (treatment of plants with carbon dioxide A01G 7/02) [3]
- 59/06 • Aluminium; Calcium; Magnesium; Compounds thereof [3]
- 59/08 • Alkali metal chlorides; Alkaline earth metal chlorides [3]
- 59/10 • Fluorides [3]
- 59/12 • Iodine, e.g. iodophors; Compounds thereof [3]
- 59/14 • Boron; Compounds thereof [3]
- 59/16 • Heavy metals; Compounds thereof [3]
- 59/18 • • Mercury [3]
- 59/20 • • Copper [3]
- 59/22 • • Arsenic [3]
- 59/24 • Cyanogen or compounds thereof, e.g. hydrogen cyanide, cyanic acid, cyanamide, thiocyanic acid [3]
- 59/26 • Phosphorus; Compounds thereof [3]
- 61/00 Biocides, pest repellants or attractants, or plant growth regulators containing substances of unknown or undetermined composition, e.g. substances characterised only by the mode of action [3]**
- 61/02 • Mineral oils; Tar oils; Tar; Distillates, extracts or conversion products thereof (containing single chemical compounds isolated from these materials A01N 27/00-A01N 59/00) [3]
- 63/00 Biocides, pest repellants or attractants, or plant growth regulators containing micro-organisms, viruses, microbial fungi, animals, e.g. nematodes, or substances produced by, or obtained from micro-organisms, viruses, microbial fungi or animals, e.g. enzymes or fermentates (containing compounds of determined constitution A01N 27/00-A01N 59/00) [3]**
- 63/02 • Substances produced by, or obtained from, micro-organisms or animals [3]
- 63/04 • Microbial fungi; Substances produced thereby or obtained therefrom [3]
- 65/00 Biocides, pest repellants or attractants, or plant growth regulators containing material from algae, lichens, bryophyta, multi-cellular fungi or plants, or extracts thereof (containing compounds of determined constitution A01N 27/00-A01N 59/00) [3, 2009.01]**
- 65/03 • Algae [2009.01]
- 65/04 • Pteridophyta [fern allies]; Filicophyta [ferns] [2009.01]
- 65/06 • Coniferophyta [gymnosperms], e.g. cypress [2009.01]
- 65/08 • Magnoliopsida [dicotyledons] [2009.01]
- 65/10 • • Apiaceae or Umbelliferae [Carrot family], e.g. parsley, caraway, dill, lovage, fennel or snakebed [2009.01]
- 65/12 • • Asteraceae or Compositae [Aster or Sunflower family], e.g. daisy, pyrethrum, artichoke, lettuce, sunflower, wormwood or tarragon [2009.01]
- 65/14 • • Celastraceae [Staff-tree or Bittersweet family], e.g. spindle tree, bittersweet or thunder god vine [2009.01]
- 65/16 • • Ericaceae [Heath or Blueberry family], e.g. rhododendron, arbutus, pieris, cranberry or bilberry [2009.01]
- 65/18 • • Euphorbiaceae [Spurge family], e.g. ricinus [castorbean] [2009.01]
- 65/20 • • Fabaceae or Leguminosae [Pea or Legume family], e.g. pea, lentil, soybean, clover, acacia, honey locust, derris or millettia [2009.01]
- 65/22 • • Lamiaceae or Labiatae [Mint family], e.g. thyme, rosemary, skullcap, selfheal, lavender, perilla, pennyroyal, peppermint or spearmint [2009.01]
- 65/24 • • Lauraceae [Laurel family], e.g. laurel, avocado, sassafras, cinnamon or camphor [2009.01]
- 65/26 • • Meliaceae [Chinaberry or Mahogany family], e.g. mahogany, langsat or neem [2009.01]
- 65/28 • • Myrtaceae [Myrtle family], e.g. teatree or clove [2009.01]
- 65/30 • • Polygonaceae [Buckwheat family], e.g. red-knees or rhubarb [2009.01]
- 65/32 • • Ranunculaceae [Buttercup family], e.g. hepatica, hydrastis or goldenseal [2009.01]
- 65/34 • • Rosaceae [Rose family], e.g. strawberry, hawthorn, plum, cherry, peach, apricot or almond [2009.01]
- 65/36 • • Rutaceae [Rue family], e.g. lime, orange, lemon, corktree or pricklyash [2009.01]
- 65/38 • • Solanaceae [Potato family], e.g. nightshade, tomato, tobacco or chilli pepper [2009.01]
- 65/40 • Liliopsida [monocotyledons] [2009.01]
- 65/42 • • Aloeaceae [Aloe family] or Liliaceae [Lily family], e.g. aloe, veratrum, onion, garlic or chives [2009.01]
- 65/44 • • Poaceae or Gramineae [Grass family], e.g. bamboo, lemon grass or citronella grass [2009.01]
- 65/46 • • Stemonaceae [Stemona family], e.g. croomia [2009.01]
- 65/48 • • Zingiberaceae [Ginger family], e.g. ginger or galangal [2009.01]