

## C05G

**MIXTURES OF FERTILISERS COVERED INDIVIDUALLY BY DIFFERENT SUBCLASSES OF CLASS [C05](#); MIXTURES OF ONE OR MORE FERTILISERS WITH MATERIALS NOT HAVING A SPECIFIC FERTILISING ACTIVITY, e.g. PESTICIDES, SOIL-CONDITIONERS, WETTING AGENTS (organic fertilisers containing added bacterial cultures, mycelia, or the like [C05F 11/08](#); organic fertilisers containing plant vitamins or hormones [C05F 11/10](#)); FERTILISERS CHARACTERISED BY THEIR FORM**

### Definition statement

*This place covers:*

Materials affecting the growth of plants solely by supplying nutrients ordinarily required for growth or materials which are used to prevent or cure mineral deficiencies in plants as listed below:

Mixtures of fertilisers covered individually by different subclasses of class [C05](#), e.g., superphosphates with ammonium nitrate, Thomas phosphate with potassium compounds, alkali or ammonium orthophosphates with ammonium nitrate, ammonium nitrate with limestone or calcium carbonate, ammonium sulfate with potassium compounds or fertilisers containing plant vitamins or hormones with fertilisers containing potassium from minerals or volcanic rocks.

Mixtures of one or more fertilisers with additives not having a specifically fertilising activity, e.g., pesticides, soil conditioners, wetting agents, nitrification inhibitors or superabsorbent polymers.

Fertilisers characterised by their form, e.g., granules, spikes or tablets.

Preparation, treatment or modification of any of the materials above: e.g., by chemical means (e.g. addition of stabilisers, preservatives), physical means (e.g., irradiation, concentration, purification, separation) or combination of both chemical and physical means, with the proviso that the resultant product is proper for classification in this subclass.

Methods of preparing fertiliser mixtures of the above subclass in general.

Fertilisers in liquid form; Special formulations prepared to obtain a liquid form of the fertiliser.

### Relationships with other classification places

In contrast to fertilisers ([C05](#)), plant growth regulators ([A01N](#)) are those materials which alter a plant through chemical modification of plant metabolism, for example auxins.

Soil-conditioning materials or soil-stabilising materials are classified in [C09K 17/00](#) and covers mixtures of soil-conditioning materials or soil-stabilising materials with fertilisers where the composition in question is characterised by the soil-conditioning or soil-stabilising properties.

Mixtures of soil-conditioning materials or soil-stabilising materials with fertilisers where the composition in question is characterised by the fertilising activity are classified in [C05G](#)

Whilst the subject matter of [C05G](#) deals with mixtures of fertilisers per se, [A01C 3/00](#) deals with methods of treating manure/methods of manuring per se and [A01C 21/00](#) deals with methods of fertilising per se.

Apparatus relevant to the subclass [C05](#) (if no specific entry for apparatus is provided, e.g., [C05B 1/10](#) apparatus for the manufacture of superphosphates) are to be classified in the place dealing with the process, otherwise in the place dealing with the products as such.

Additionally, individual or specific types of apparatus can be classified in the relevant area of the IPC, e.g., [F26B 17/00](#).

## References

### Limiting references

*This place does not cover:*

Organic fertilisers containing added bacterial cultures, mycelia or the like	<a href="#">C05F 11/08</a>
Fertilisers containing plant vitamins or hormones	<a href="#">C05F 11/10</a>

### Informative references

*Attention is drawn to the following places, which may be of interest for search:*

Harrows with means for distributing fertilisers	<a href="#">A01B 25/00</a>
Fertiliser distributors	<a href="#">A01C 15/00</a>
Mowers combined with dispensing apparatus, e.g., for fertilisers	<a href="#">A01D 43/14</a>
HORTICULTURE; CULTIVATION OF VEGETABLES, FLOWERS, RICE, FRUIT, VINES, HOPS, OR SEAWEED; FORESTRY; WATERING	<a href="#">A01G</a>
Root feeders; Injecting fertilisers into the roots	<a href="#">A01G 29/00</a>
Processes or devices for granulating materials, in general	<a href="#">B01J 2/00</a>
Soil-conditioning or soil-stabilising materials	<a href="#">C09K 17/00</a>

## Special rules of classification

An ingredient in a mixture of fertilisers, or a single fertiliser which contains more than one of the chemical elements on which the subdivision into subclasses is based, is classified only in the first of the appropriate subclasses. Thus, a nitrophosphate or an ammoniated superphosphate is classified in [C05B](#) but not in [C05C](#), magnesium phosphate is classified in [C05B](#) but not in [C05D](#), and calcium cyanamide in [C05C](#) but not in [C05D](#).

Information relative to the form in which the fertilizer is presented, e.g. granulation, coating, etc. is always given in addition to the chemical composition of the fertilizers.

General statements in relation to a "fertiliser being formulated as liquid, powder, granulate or any other suitable form" are not given per se a class in this group. Not all possible liquid fertilisers are classified in this subclass, only when the fertiliser is liquid and is an important feature of the invention.

Any ingredient in a mixture, which is considered to present information of interest for search, is also classified using a combination of classification symbols. If a document concerns embodiments comprising mixtures whose elements are covered individually by different subclasses, groups or subgroups, the document is classified with a Combination-set.

The following rules apply:

- The first element of the Combination-set corresponds to the first relevant (sub)group mentioned in the classification scheme independently of the importance or relevance of the element in the whole fertilizer mixture;
- the following element or elements of the Combination\_set are added sequentially in the order in which they appear in the classification scheme to the first element using a ",".

Example: a fertilizer containing a mixture of superphosphate ([C05B 1/02](#)), ammonium nitrate ([C05C 1/00](#)) and potassium chloride ([C05D 1/02](#)) will be given the Combination-set [C05B 1/02](#), [C05C 1/00](#), [C05D 1/02](#).

Example: a fertilizer containing a mixture of either superphosphate ([C05B 1/02](#)) or ammonium nitrate ([C05C 1/00](#)) with potassium chloride ([C05D 1/02](#)) will be given the Combination-set [C05B 1/02](#), [C05D 1/02](#) and [C05C 1/00](#), [C05D 1/02](#).

## Glossary of terms

In this place, the following terms or expressions are used with the meaning indicated:

Fertiliser	(fertiliser material) Natural or artificial substance containing the chemical elements that improve growth and productiveness of plants.
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## Synonyms and Keywords

In patent documents, the following words/expressions are often used as synonyms:

- "fertiliser" and "plant nutrient "
- "Plant food", "Amendment", "Plant food", "Agricultural chemical" and "Fertiliser"

In patent documents, the following words/expressions are often used with the meaning indicated:

"enrichment"	"fertiliser"
"soil amendment"	" composition capable of modifying the chemical (pH) or physical (structure) condition of soils for agricultural purposes".

## C05G 1/00

**Mixtures of fertilisers belonging individually to different subclasses of [C05](#)**

### Special rules of classification

This group is mainly used as additional information or for documents difficult to classify anywhere else in the previous groups of this classification as it would be the case for unspecific mixtures of organic and inorganic materials .

In the case of mixtures with well defined components, combination classes giving specific information about these components will be used instead.

## C05G 3/00

**Mixtures of one or more fertilisers with additives not having a specially fertilising activity**

### Definition statement

*This place covers:*

Fertilisers mixed with substances not encompassed under the finer classification given below. Some examples of substances classified in this group are : colorants and pigments, corrosion inhibitors, odours, preservatives, magnetic materials etc.

### Special rules of classification

Whether a fertiliser is characterised by the materials it is prepared from and the form which it presents a class pertinent to both aspects should be given.

**C05G 3/20****for preventing the fertilisers being reduced to powder; Anti-dusting additives****References****Informative references***Attention is drawn to the following places, which may be of interest for search:*

Using agents to prevent the granules sticking together; Rendering particulate materials free flowing in general, e.g. making them hydrophobic	<a href="#">B01J 2/30</a>
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**C05G 3/80****Soil conditioners****Definition statement***This place covers:*

Mixtures of fertilisers with other compounds mainly to improve the physical structure or water retention capacity of soils for agricultural purposes. These compounds are e.g. water retaining polymers, sand or clay materials.

**References****Informative references***Attention is drawn to the following places, which may be of interest for search:*

Soil-conditioning or soil-stabilising materials for other than agricultural purposes	<a href="#">C09K 17/00</a>
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**C05G 5/00****Fertilisers characterised by their form****References****Informative references***Attention is drawn to the following places, which may be of interest for search:*

Granulating fertilisers characterised by their chemical constitution	<a href="#">C05B</a> - <a href="#">C05G</a>
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