

C05B

PHOSPHATIC FERTILISERS

Definition statement

This subclass/group covers:

Fertilizer compositions containing phosphorus in any organic or inorganic form, processes and apparatus for obtaining them.

Relationship between large subject matter areas

Treating manure; apparatus for distributing fertiliser [A01C](#).

Soil-cultivation substrates [A01G 9/00](#).

Plant growth regulators [A01N](#).

Soil-conditioning or soil-stabilising materials [C09K 17/00](#).

Any apparatus for preparing fertilisers may be classified in those areas of C05 that are specific for such apparatus – e.g., [C05B 1/10](#) – apparatus for the manufacture of superphosphates.

Otherwise, individual apparatus should be classified in the relevant area of the IPC, e.g., [F26B 7/00](#).

References relevant to classification in this subclass

This subclass/group does not cover:

Nitrogenous fertilisers	C05C
Inorganic fertilisers not covered by subclasses C05B , C05C ; fertilisers producing carbon dioxide	C05D
Organic fertilisers not covered by subclasses C05B , C05C , e.g. fertilisers from waste or refuse	C05F

Informative references

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

Harrows with means for distributing fertilisers	A01B 25/00
Fertilisers distributors	A01C 15/00

Mowers combined with dispensing apparatus, e.g. for fertilisers	A01D 43/14
Horticulture; cultivation of vegetables, flowers, rice, fruit, vines, hops or seaweed; forestry; watering	A01G
Root feeders; injecting fertilisers into roots	A01G 29/00
Phosphorus; compounds thereof	C01B 25/00

Special rules of classification within this subclass

An ingredient in a mixture of fertilisers, or a single fertiliser which contains more than one of the chemical elements on which the subdivision is based, is classified only in the first of the appropriate places. 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.

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 subclass/group, 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 expressions "fertiliser" and "plant nutrient " are often used as synonyms.

In patent documents the following expressions/words "Amendment", "Plant food", "Agricultural chemical" and "Fertiliser" are often used as synonyms.

In patent documents the expression/word "enrichment" is often used with the meaning "fertiliser"

The expression "soil amendment" is often used with the meaning " composition capable of modifying the chemical (pH) or physical (structure) condition of soils for agricultural purposes".

C05B 1/00

Superphosphates, i.e. fertilisers produced by reacting rock or bone phosphates with sulfuric or phosphoric acid in such amounts and concentrations as to yield solid products directly

Definition statement

This subclass/group covers:

Fertilisers produced by reacting rock or bone phosphates with sulphuric or phosphoric acid in such amounts and concentrations as to yield solid products directly and apparatus for their manufacture.

References relevant to classification in this group

This subclass/group does not cover:

Fertilizers based essentially on ammonium orthophosphate	C05B 7/00
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C05B 3/00

**Fertilisers based essentially on di-calcium phosphate
(C05B11/00 takes precedence)**

References relevant to classification in this group

This subclass/group does not cover:

Di calcium phosphate fertilisers produced by wet treating raw materials with acids or alkalis	C05B 11/00
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C05B 5/00

Thomas phosphate; Other slag phosphates

Definition statement

This subclass/group covers:

Fertilizers obtained from phosphate containing slags, waste or by products of metallurgical processes with fertilizer value.

Glossary of terms

In this subclass/group, the following terms (or expressions) are used with the meaning indicated:

Thomas phosphate; Thomas slag	slag calcium phosphate obtained in steelmaking converters from pig iron with high phosphorus acid content
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Synonyms and Keywords

In patent documents the following expressions "Thomas phosphate", "Thomas slag" and "converter slag" are often used as synonyms.

C05B 7/00

Fertilisers based essentially on alkali or ammonium orthophosphates (C05B11/00 takes precedence)

References relevant to classification in this group

This subclass/group does not cover:

Alkali or ammonium orthophosphates produced by wet or leach treatment with acids or alkalis	C05B 11/00
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C05B 9/00

Fertilisers based essentially on phosphates or double phosphates of magnesium (C05B11/00 takes precedence)

References relevant to classification in this group

This subclass/group does not cover:

Fertilisers based essentially on phosphates or double phosphates of magnesium produced by wet or leach treatment with acids or alkalis	C05B 11/00
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C05B 11/00

Fertilisers produced by wet-treating or leaching raw materials either with acids in such amounts and concentrations as to yield solutions followed by neutralisation, or with alkaline lyes

C05B 13/00

Fertilisers produced by pyrogenic processes from phosphatic materials

Definition statement

This subclass/group covers:

Fertilisers produced by pyrogenic processes from phosphatic materials like rock phosphates or metallic phosphorus compounds such as to render polyphosphate fertilisers.

C05B 15/00

Organic phosphatic fertilisers (bone meal C05B17/00)

Definition statement

This subclass/group covers:
Phosphatic fertilisers of organic nature.

References relevant to classification in this group

This subclass/group does not cover:

Bone meal	C05B 17/00
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C05B 17/00

Other phosphatic fertilisers, e.g. soft rock phosphates, bone meal

Definition statement

This subclass/group covers:
Other phosphatic fertilisers not classified in the previous groups, e.g. soft rock phosphates, bone meal, phosphite fertilisers.

C05B 19/00

Granulation or pelletisation of phosphatic fertilisers, other than slag (granulating apparatus B01J2/00 ; granulating slag C04B)

Definition statement

This subclass/group covers:
Exclusively granulation or pelletisation of fertilizers belonging to any of the groups [C05B](#).

References relevant to classification in this group

This subclass/group does not cover:

Granulating slag	C04B
Granulating apparatus	B01J 2/00
Process in general for granulating fertilizers	C05G 3/0058