

C05F

ORGANIC FERTILISERS NOT COVERED BY SUBCLASSES C05B, C05C, e.g. FERTILISERS FROM WASTE OR REFUSE [N: (breeding of earthworms A01K67/0332)]

Definition statement

This subclass/group covers:

Organic fertilisers not covered by the preceding subclasses.

Fertilisers made from animal parts.

Fertilisers from human or animal excrements.

Fertilisers from wastes originating from food or agricultural industries.

Fertiliser from waste water or sludges neither from animal nor agricultural origin.

Fertilisers from household or town refuse.

Fertilisers from peat , brown coal and other vegetable deposits.

Fertilisers containing microorganisms.

Fertilisers containing plant vitamins or hormones.

Preparation of fertilisers characterised by the composting step and apparatus therefor.

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](#).

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".

C05F 1/00

Fertilisers made from animal corpses, or parts thereof

Definition statement

This subclass/group covers:

Fertilisers made from whole animal corpses; from parts of animals which can not be more specifically classified in the subgroups of this group, such as non differentiated processes for treating fish or meat or animal derived materials; fertilisers from general materials such as proteinaceous materials and animal material not further specified.

References relevant to classification in this group

This subclass/group does not cover:

Fertilisers from animal excrements	C05F 3/00
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Special rules of classification within this group

Mixtures of these fertilizers with other fertilizers belonging individually to other groups of the classification will be given a Combination-set as explained under the Note for class C05.

C05F 3/00

Fertilisers from human or animal excrements, e.g. manure

Definition statement

This subclass/group covers:

Fertilisers from animal excrements, manure, liquid manure, etc.

References relevant to classification in this subgroup

This subclass/group does not cover:

Treating manure	A01C 3/00
Fertilisers from waste water, sludge or similar masses	C05F 7/00
Processing liquids by a fermentation step	C05F 17/0018

Special rules of classification within this group

Documents relating to a manure composition or process for its preparation in combination with an apparatus for obtaining thereof are classified as the Combination-set ([C05F 3/00](#), [C05F 3/06](#)).

Mixtures of these fertilizers with other fertilizers belonging individually to other groups of the classification will be given a Combination-set as explained in the Note under C05.

C05F 3/06

Apparatus for the manufacture;

Definition statement

This subclass/group covers:

Apparatus for the manufacture of fertilisers from excrements of animal or human origin.

Relationship between large subject matter areas

Closets for human excrements are classified under [A47K 11/00](#).

Treatment of animal manure is classified under [A01C 3/00](#).

References relevant to classification in this group

This subclass/group does not cover:

Apparatus for composting excrement	C05F 17/02
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C05F 5/00

Fertilisers from distillery wastes, molasses, vinasses, sugar plant or similar wastes or residues, [N: e.g. from waste

originating from industrial processing of raw material of agricultural origin or derived products thereof]

C05F 7/00

Fertilisers from waste water, sewage sludge, sea slime, ooze or similar masses (methods or installations for de-watering, drying or incineration of sludge C02F11/00)

C05F 9/00

Fertilisers from household or town refuse

Definition statement

This subclass/group covers:

Fertilisers from wastes from human settlements, garbage, waste paper etc.

Relationship between large subject matter areas

Treatment of town refuse [B09B](#).

References relevant to classification in this group

This subclass/group does not cover:

Fertilisers from town/sewage sludge	C05F 7/00
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Special rules of classification within this group

Mixtures of these fertilizers with other fertilizers belonging individually to other groups of the classification will be given a Combination-set as explained under Note for class C05.

Fertilisers from town refuse treated by a fermentation process should always be given a classification in [C05F 17/00](#).

C05F 9/04

Biological compost

Definition statement

This subclass/group covers:

Composted material per se obtained from household waste or any other source where no pertinent class exists in [C05F 17/00](#).

References relevant to classification in this subgroup

This subclass/group does not cover:

Preparation of fertilizers from household or town refuse characterised by the composting step	C05F 17/00
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Special rules of classification within this subgroup

When a fertiliser mixture contains mature compost as one of its components, the subgroup [C05F 9/04](#) should be given in combination to the groups corresponding to other components of the fertiliser in order to indicate the presence of compost material in the mixture.

C05F 11/00

Other organic fertilisers

Definition statement

This subclass/group covers:

Fertilisers from organic products, natural or synthetic, not covered by any of the previous classes.

Some examples of materials belonging to this class are wood products such as bark or sawdust, fibrous materials, polymers, seaweeds.

References relevant to classification in this group

This subclass/group does not cover:

Humic acids or materials containing them, peat, coal and similar	C05F 11/02
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C05F 11/02

from peat, brown coal, and similar vegetable deposits

Definition statement

This subclass/group covers:

Materials containing humic substances or materials capable of supplying humic materials after treatment. Humic materials themselves e.g. humic acids, fulvic acids, himatomelanic acids etc.

C05F 17/00

Preparation of fertilisers characterised by the composting step

Definition statement

This subclass/group covers:

All processes for obtaining a fertilizer by fermentation of organic wastes not covered by one of the further subgroups.

Special rules of classification within this group

No Combination-sets are used in this group and its subgroups.

Every aspect of a document is classified separately with the pertinent codes.

C05F 17/0009

[N: in concurrence with invertebrata, (e.g. worms, flies, maggots)]

Relationship between large subject matter areas

Worm breeding [A01K 67/0332](#).

C05F 17/0018

[N: Processing of liquids or slurries]

Definition statement

This subclass/group covers:

Fermentation of liquids or combination of solids and liquids to obtain a compost.

References relevant to classification in this group

This subclass/group does not cover:

Fertilisers from manures	C05F 3/00
Fertilisers from sludge	C05F 7/00
Treatment of manures	A01C 3/00

C05F 17/0036

[N: Activators/stimulators for composting process]

Definition statement

This subclass/group covers:

Fermentation processes where specific microorganisms are added.

C05F 17/0045

[N: Adding/removing compounds to/from the process streams other than water and air]

Definition statement

This subclass/group covers:

Fermentation processes where materials are added or extracted in order to modify the course of the fermentation.

Typical compounds are pH adjusters, structure improving materials etc.

C05F 17/0054

[N: the process stream being a gas]

References relevant to classification in this group

This subclass/group does not cover:

Chemical or biological purification of waste gases	B01D 53/34
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C05F 17/02

Apparatus therefor

Definition statement

This subclass/group covers:

Apparatus for processing wastes by a fermentation step which do not fall under any of the subgroups that follow.

Special rules of classification within this group

No Combination-sets are used in this group and its subgroups

Every aspect of a document is classified separately with the pertinent code.

C05F 17/0205

[N: Small scale installations, i.e. no provisions for mechanically feeding or removing of material from installations, e.g. bins, garden composters]

References relevant to classification in this group

This subclass/group does not cover:

Refuse receptacles	B65F 1/00
Refuse receptacles adapted for compost	B65F 2001/1489

C05F 17/027

[N: the process stream being a gas stream, e.g. aeration patterns]

Definition statement

This subclass/group covers:

Apparatus with means for forced aeration of composting masses.

References relevant to classification in this group

This subclass/group does not cover:

Floors roofs or bottoms for drying solid materials	F26B 25/10
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Special rules of classification within this group

Devices presenting aeration merely caused by a natural draft is not taken into account for classification in this group.