

## SECTION C — CHEMISTRY; METALLURGY

## C05 FERTILISERS; MANUFACTURE THEREOF

**Note(s)**

1. 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.
2. Any ingredient in a mixture, which is considered to represent information of interest for search, may also additionally be classified according to Note (1). This can, for example, be the case when it is considered of interest to enable searching of mixtures using a combination of classification symbols. Such non-obligatory classification should be given as "additional information".

## C05B PHOSPHATIC FERTILISERS

**Subclass index**

SUPERPHOSPHATES.....	1/00
PRODUCED BY WET TREATMENTS.....	11/00
PRODUCED BY PYROGENIC PROCESSES.....	13/00
OTHER INORGANIC FERTILISERS.....	3/00-9/00, 17/00
ORGANIC FERTILISERS.....	15/00, 17/00
GRANULATION; PELLETISATION.....	19/00
MIXTURES OF PHOSPHATIC FERTILISERS.....	21/00

<b>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</b>	11/04 • using mineral acid
1/02 • Superphosphates	11/06 • • using nitric acid (nitrophosphates)
1/04 • Double-superphosphate; Triple-superphosphate Other fertilisers based essentially on monocalcium phosphate	11/08 • • using sulfuric acid
1/06 • Ammoniation of superphosphates (fertilisers based essentially on ammonium orthophosphate C05B 7/00)	11/10 • • using orthophosphoric acid
1/10 • Apparatus for the manufacture of superphosphates	11/12 • • using aqueous hydrochloric acid
<b>3/00 Fertilisers based essentially on di-calcium phosphate (C05B 11/00 takes precedence)</b>	11/14 • • using wet gaseous acids
<b>5/00 Thomas phosphate; Other slag phosphates</b>	11/16 • using alkaline lyes
<b>7/00 Fertilisers based essentially on alkali or ammonium orthophosphates (C05B 11/00 takes precedence)</b>	<b>13/00 Fertilisers produced by pyrogenic processes from phosphatic materials</b>
<b>9/00 Fertilisers based essentially on phosphates or double phosphates of magnesium (C05B 11/00 takes precedence)</b>	13/02 • from rock phosphates (C05B 13/06 takes precedence)
<b>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</b>	13/04 • from metallic phosphorus compounds, e.g. ferro-phosphorus
11/02 • Pretreatment	13/06 • Alkali or alkaline earth meta- or polyphosphate fertilisers
	<b>15/00 Organic phosphatic fertilisers (bone meal C05B 17/00)</b>
	<b>17/00 Other phosphatic fertilisers, e.g. soft rock phosphates, bone meal</b>
	17/02 • containing manganese
	<b>19/00 Granulation or pelletisation of phosphatic fertilisers other than slag</b>
	19/02 • of superphosphates or mixtures containing them
	<b>21/00 Mixtures of phosphatic fertilisers covered by more than one of main groups C05B 1/00-C05B 19/00</b>

## C05B

## C05C NITROGENOUS FERTILISERS

Subclass index

BASED ON NITRATES.....	1/00, 5/00
BASED ON AMMONIUM SALTS, AMMONIA.....	1/00, 3/00
BASED ON CYANAMIDE.....	7/00
BASED ON UREA.....	9/00
OTHER FERTILISERS.....	11/00
MIXTURES OF NITROGENOUS FERTILISERS.....	13/00

<b>1/00 Ammonium nitrate fertilisers</b>	<b>7/00 Fertilisers containing calcium or other cyanamides</b>
1/02 • Granulation; Pelletisation; Stabilisation; Colouring	7/02 • Granulation; Pelletisation; De-gassing; Hydrating; Hardening; Stabilisation; Oiling
<b>3/00 Fertilisers containing other salts of ammonia or ammonia itself, e.g. gas liquor</b>	<b>9/00 Fertilisers containing urea or urea compounds</b>
	9/02 • containing urea-formaldehyde condensates
<b>5/00 Fertilisers containing other nitrates</b>	<b>11/00 Other nitrogenous fertilisers</b>
5/02 • containing sodium or potassium nitrate	
5/04 • containing calcium nitrate	<b>13/00 Mixtures of nitrogenous fertilisers covered by more than one of main groups C05C 1/00-C05C 11/00</b>

## C05D INORGANIC FERTILISERS NOT COVERED BY SUBCLASSES C05B, C05C; FERTILISERS PRODUCING CARBON DIOXIDE

<b>1/00 Fertilisers containing potassium</b> (C05D 7/00 takes precedence)	<b>5/00 Fertilisers containing magnesium</b> (C05D 7/00 takes precedence)
1/02 • Manufacture from potassium chloride or sulfate or double or mixed salts thereof	<b>7/00 Fertilisers producing carbon dioxide</b>
1/04 • from minerals or volcanic rocks	<b>9/00 Other inorganic fertilisers</b>
<b>3/00 Calcareous fertilisers</b> (C05D 7/00 takes precedence)	9/02 • containing trace elements
3/02 • from limestone, calcium carbonate, calcium hydrate, slaked lime, calcium oxide, waste calcium compounds	<b>11/00 Mixtures of fertilisers covered by more than one of main groups C05D 1/00-C05D 9/00</b>
3/04 • from blast-furnace slag or other slags containing lime or calcium silicates	

## C05F ORGANIC FERTILISERS NOT COVERED BY SUBCLASSES C05B, C05C, e.g. FERTILISERS FROM WASTE OR REFUSE

Note(s)

Processes where the composting step is the characterising feature, or apparatus therefor, are classified in group C05F 17/00.

<b>1/00 Fertilisers made from animal corpses, or parts thereof</b>	<b>7/00 Fertilisers from waste water, sewage sludge, sea slime, ooze or similar masses</b> (methods or installations for de-watering, drying, or incineration of sludge C02F 11/00)
1/02 • Apparatus for their manufacture	7/02 • from sulfite liquor or other waste lyes from the manufacture of cellulose
<b>3/00 Fertilisers from human or animal excrements, e.g. manure</b>	7/04 • from waste liquors in the potash industry
3/02 • Guano	<b>9/00 Fertilisers from household or town refuse</b>
3/04 • from human faecal masses	9/02 • Apparatus for the manufacture
3/06 • Apparatus for their manufacture	9/04 • Biological compost
<b>5/00 Fertilisers from distillery wastes, molasses, vinasses, sugar plant, or similar wastes or residues</b>	<b>11/00 Other organic fertilisers</b>
	11/02 • from peat, brown coal, or similar vegetable deposits
	11/04 • Horticultural earth ("Gärtnerische Erden") from peat

- 11/06 • • Apparatus for their manufacture
- 11/08 • Organic fertilisers containing added bacterial cultures, mycelia or the like
- 11/10 • Fertilisers containing plant vitamins or hormones

**15/00** Mixtures of fertilisers covered by more than one of main groups C05F 1/00-C05F 11/00; Fertilisers from mixtures of starting materials, all the starting materials being covered by this subclass but not by the same main group [5]

**17/00** Preparation of fertilisers characterised by the composting step [5]

- 17/02 • Apparatus therefor [5]

**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 [4]**

**Note(s)**

1. This subclass covers mixtures of fertilisers with soil-conditioning or soil-stabilising materials characterised by their fertilising activity.
2. This subclass does not cover mixtures of fertilisers with soil-conditioning or soil-stabilising materials characterised by their soil-conditioning or soil-stabilising activity, which are covered by group C09K 17/00.

**1/00** Mixtures of fertilisers covered individually by different subclasses of class C05

- 1/02 • of superphosphates with ammonium nitrate
- 1/04 • of Thomas phosphate with potassium compounds
- 1/06 • of alkali or ammonium orthophosphates with ammonium nitrate or ammonium sulfate or other nitrates or potassium compounds
- 1/08 • of ammonium nitrate with limestone or calcium carbonate
- 1/10 • of ammonium sulfate with potassium compounds

**3/00** Mixtures of one or more fertilisers with materials not having a specifically fertilising activity

- 3/02 • with pesticides
- 3/04 • with soil conditioners
- 3/06 • with wetting agents
- 3/08 • with agents affecting the nitrification of ammonium compounds or urea in the soil
- 3/10 • with dust-preventing coatings [4]

**5/00** Fertilisers characterised by their form (granulating fertilisers characterised by their chemical constitution, see the relevant groups in C05B-C05G) [4]