## SECTION C — CHEMISTRY; METALLURGY

### C05 FERTILISERS; MANUFACTURE THEREOF

#### Note(s)

- 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 <u>first</u> of the appropriate subclasses. Thus, a nitrophosphate or an ammoniated
  superphosphate is classified in C05B but not in C05D, 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

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

- 1/02 Superphosphates
- Double-superphosphate; Triple-superphosphate Other fertilisers based essentially on monocalcium phosphate
- Ammoniation of superphosphates (fertilisers based essentially on ammonium orthophosphate C05B 7/00)
- 1/10 Apparatus for the manufacture of superphosphates
- 3/00 Fertilisers based essentially on di-calcium phosphate (C05B 11/00 takes precedence)
- 5/00 Thomas phosphate; Other slag phosphates
- 7/00 Fertilisers based essentially on alkali or ammonium orthophosphates (C05B 11/00 takes precedence)
- 9/00 Fertilisers based essentially on phosphates or double phosphates of magnesium (C05B 11/00 takes precedence)
- 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
- 11/02 Pretreatment

11/04 • using mineral acid

11/06

- using nitric acid (nitrophosphates)
- 11/08 • using sulfuric acid
- 11/10 using orthophosphoric acid
- 11/12 using aqueous hydrochloric acid
- 11/14 • using wet gaseous acids
- 11/16 using alkaline lyes

# 13/00 Fertilisers produced by pyrogenic processes from phosphatic materials

- 13/02 from rock phosphates (C05B 13/06 takes precedence)
- 13/04 from metallic phosphorus compounds, e.g. ferrophosphorus
- 13/06 Alkali or alkaline earth meta- or polyphosphate fertilisers

# **15/00 Organic phosphatic fertilisers** (bone meal C05B 17/00)

## 17/00 Other phosphatic fertilisers, e.g. soft rock phosphates, bone meal

- 17/02 containing manganese
- 19/00 Granulation or pelletisation of phosphatic fertilisers other than slag (granulating slag C04B)
- $19/02 \quad \bullet \quad \text{of superphosphates or mixtures containing them}$
- 21/00 Mixtures of phosphatic fertilisers covered by more than one of main groups C05B 1/00-C05B 19/00

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#### C05C NITROGENOUS FERTILISERS

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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

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

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

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

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

## Note(s)

- 1. Processes using enzymes or micro-organisms in order to:
  - i. liberate, separate or purify a pre-existing compound or composition, or to
  - ii. treat textiles or clean solid surfaces of materials

are further classified in subclass C12S.

 $2. \qquad \text{Processes where the composting step is the characterising feature, or apparatus therefor, are classified in group C05F 17/00.}$ 

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

11/00	Other organic fertilisers	15/00	Mixtures of fertilisers covered by more than one of
11/02	<ul> <li>from peat, brown coal, or similar vegetable deposits</li> </ul>		main groups C05F 1/00-C05F 11/00; Fertilisers from
11/04	<ul> <li>Horticultural earth ("Gärtnerische Erden") from</li> </ul>		mixtures of starting materials, all the starting
	peat		materials being covered by this subclass but not by
11/06	<ul> <li>Apparatus for their manufacture</li> </ul>		the same main group [5]
11/08	<ul> <li>Organic fertilisers containing added bacterial cultures, mycelia or the like</li> </ul>	17/00	Preparation of fertilisers characterised by the composting step [5]
11/10	• Fertilisers containing plant vitamins or hormones	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 <u>covers</u> mixtures of fertilisers with soil-conditioning or soil-stabilising materials characterised by their fertilising activity.
- 2. This subclass <u>does not cover</u> 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	3/00	Mixtures of one or more fertilisers with materials not having a specifically fertilising activity
1/02	<ul> <li>of superphosphates with ammonium nitrate</li> </ul>	3/02	with pesticides
1/04	<ul> <li>of Thomas phosphate with potassium compounds</li> </ul>	3/04	<ul> <li>with soil conditioners</li> </ul>
1/06	<ul> <li>of alkali or ammonium orthophosphates with</li> </ul>	3/06	<ul> <li>with wetting agents</li> </ul>
	ammonium nitrate or ammonium sulfate or other nitrates or potassium compounds	3/08	<ul> <li>with agents affecting the nitrification of ammonium compounds or urea in the soil</li> </ul>
1/08	<ul> <li>of ammonium nitrate with limestone or calcium carbonate</li> </ul>	3/10	with dust-preventing coatings [4]
1/10	of ammonium sulfate with potassium compounds	5/00	<b>Fertilisers characterised by their form</b> (granulating fertilisers characterised by their chemical constitution, see the relevant groups in C05B-C05G) [4]

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