SUGGESTION FOR EXTENSION OF UDC SCHEDULE FOR FERTILIZERS

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Discusses the inadequacy of the UDC schedules for Fertilizers and proposes an extension of the Class 631.81. Also suggests the use and extension of the Class 661.58 for Manufacture of Fertilizers.

Introduction

The foundation of modern fertilizer industry was laid by Liebig in 1840. He envisioned a fertilizer industry with nutrients such as phosphate, lime, magnesia and potash prepared in chemical factories.

The most popular fertilizer materials today include anhydrous ammonia, nitrogen solutions, ammonium nitrate, urea, triple superphosphate, ammonium polyphosphate solutions and high grade potassium chloride. These materials that remain popular may change in form due to growing demand for granular, course and solution form potash.

Provision of Numbers for Fertilizers in UDC:

In UDC class 631.8 - Fertilizers, manuring has 7 principal divisions as:

631.81-Manure, plant nutrients generally.
62-Chemical (artificial) fertilizers in general. Mineral, lime, iron, sulphate, etc.
63-Potassium fertilizers (excl. nitrate).
64-Nitrogen fertilizers, nitrates, nitrification.
65-Phosphate and superphosphate fertilizers.

87-Other organic fertilizers. Green manuring, Humus, Refuse, Compost.

The above 7 divisions are too scanty for classification purpose where a pin-pointed classification is needed. After collecting all types of literature on fertilizer we come to this conclusion that without expansion of the existing divisions it is not possible for anyone to accommodate the documents in a systematic way.

Two Aspects of Fertilizers.

There are two clear-cut aspects of fertilizers for the purpose of Library classification.

Application point of view, and
Manufacturing point of view.

But in UDC there is no place for fertilizer manufacture under Chemical Technology. It is very difficult for a classifier to provide class number for this aspect under chemical technology.

Day by day new fertilizer industries are coming up and Engineers and Technologists desire to see all types of manufacturing processes in one place under Chemical Technology. The UDC may allocate 661.58 for fertilizer manufacture and for specific type of fertilizer it may be subdivided by 631.8 and its subdivisions after a colon.

E.g. 661.58:631.821.265 manufacture of ammonium pyro-phosphatic fertilizer. To achieve this a detailed schedule of classes (different types of fertilizers) with class numbers is suggested under the class 631.8. The
same divisions could be used under 661.58 for denoting the manufacturing aspect of any type of fertilizers.

Extended UDC schedule for Fertilizers, Manuring:

631.8 Fertilizers, Manuring

631.81 Manure, Plant nutrients generally
   .811 Blended, mixed, fertilizer
   .812 Bacterial fertilizer
   .82 Chemical (artificial), fertilizers in general, minerals, lime, iron sulphate etc

631.821 Multi nutrient fertilizers
   .1 Ammonium phosphate
   .12 Ammoniated super phosphate
   .2 Ammonium phosphate combined with other materials
   .21 Mono-ammonium-diammonium phosphate
   .22 Ammonium phosphate sulphate
   .23 Ammonium phosphate urea
   .25 Ammonium phosphate-ammonium chloride
   .26 Ammonium polyphosphate
   .261 Ammonium polyphosphate sulphur granular
   .262 Ammonium potassium polyphosphate
   .263 Ammonium ortho phosphate
   .264 Ammonium meta phosphate
   .265 Ammonium pyro phosphate
   .266 Mono-ammonium phosphate
   .267 Di-ammonium phosphate
   .27 Nitric phosphate
   .271 Nitro phosphate
   .272 Nitro phoska
   .28 Compound fertilizer
   .281 Containing nitrogen, phosphate and potassium
   .282 Containing organic materials

631.822 Suspension slurry
   .823 Secondary nutrients
   .1 Calcium compounds
   .2 Magnesium compounds
   .3 Sulphur compounds
   .824 Micro nutrients
   .1 Boron and its compounds
   .2 Molybdenum and its compounds
   .3 Sino and its compounds
   .4 Copper and its compounds
   .5 Manganese and its compounds
   .6 Iron and its compounds
   .825 Sulphur coated fertilizer
   .826 Sulphur coated urea

631.83 Potassium fertilizer (excl-nitrate)
   .831 Potassium chloride
   .832 Potassium sulphate
   .1 Potassium sulphate magnesium sulphate
   .833 Potassium phosphate
   .1 Potassium ortho phosphate
   .2 Potassium meta phosphate
   .3 Potassium poly phosphate
   .834 Muriate
   .835 Crude salts
   .863 Manure salts

631.84 Nitrogen fertilizers; Nitrates, nitrification
   .841 Ammonia
   .1 Aqua ammonia (ammonia liquor)
   .2 Anhydrous ammonia
   .842 Ammonium nitrate
   .1 Urea ammonium sulphate
   .2 Urea ammonium phosphate
   .21 Urea ammonium poly phosphate
   .3 Urea phosphate coating
   .845 Nitrogen solution
   .846 Calcium nitrate
   .1 Calcium nitrate urea
   .2 Calcium ammonium nitrate
   .3 Calcium cyanamid
   .4 Sodium nitrate
   .847 Ammonium chloride
   .1 Ammonium
   .12 Ammonium bi-carbonate
   .13 Ammonium carbonate urea-form liquid

631.85 Phosphate and superphosphate fertilizers
   .851 Phosphate rock
   .853 Superphosphate
   .1 Simple superphosphate
   .2 Single superphosphate
   .3 Double superphosphate
   .4 Normal superphosphate
   .5 Triple superphosphate
631.854 Basic slag

. 855 Calcium phosphate
   . 1 Calcium ortho phosphate
   . 2 Calcium meta phosphate
   . 4 Calcium poly phosphate
   . 5 Calcium chloride phosphate

631.86 Organic fertilizers, stable and liquid manure

. 1 Animal manure
. 11 Bone meal
. 2 Seaweed (ash)

631.87 Other organic fertilizer, Green manuring, Humus, Refuse, Compost

. 871 Green manuring
   . 1 Legumes
   . 2 Non legumes

. 872 Farm-yard
   . 1 Dung
   . 2 Urine
   . 3 Folder waste

. 873 Humus
   . 1 Sewage
   . 2 Activated sludge

. 874 Refuse
. 875 Compost

. 876 Oil cake
. 877 Wood ashes