



AGROMATE (M) SDN. BHD.



Premium compound fertiliser coated  
in a unique resin for precise and  
controlled release of nutrients.



# AgCOTE

## CONTROLLED RELEASE FERTILIZER

### Advantages

**01** Premium imported compound with macronutrients and micronutrients

**02** Reduce fertilizer loss and save on labour cost

**03** Minimize environmental pollution and improve nutrient use efficiency

**04** Concurrence with water soluble fertiliser with minimum leaching

**05** Polyolefin-coated with highly controlled nutrient release characterised by temperature

AgCOTE is a high quality compound fertilizer coated in a unique resin to insure precision and controlled release of nutrients. The pliable, resilient coating contains a release agent which allows the penetration of water and subsequent release of the fertilizer into the soil. The amount of this release agent specifies the length of time the product will release its nutrients. The release period is specified by Type.

e.g.: Type 180 means the fertilizer will release 80% of its nitrogen evenly over a 180 day period at a constant temperature of 77°F.

The rate of release of AgCOTE is modified by temperature, slowing down when temperatures are cooler and releasing more quickly under warmer temperatures, coinciding with the crop's rate of growth. The nutrient release of AgCote is not significantly affected by soil moisture, soil type, soil pH or microbial activity in the soil.

### Product Description

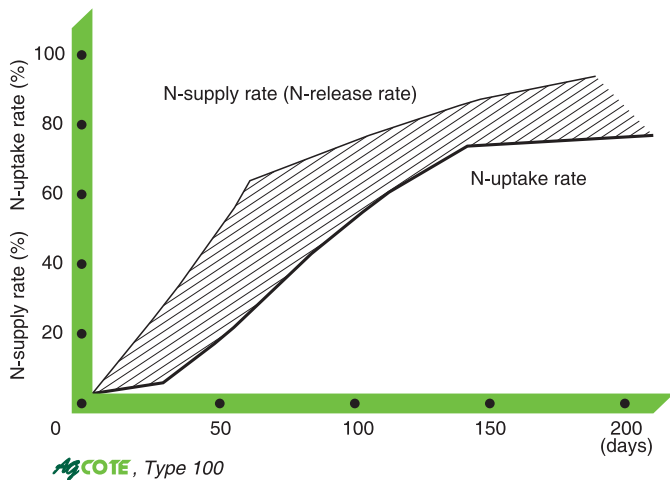
Item	Description
Coating	Resin
Colour	Grey
Particle Size	Regular (2.8mm - 4.2mm)
Release Period	8 – 12 Months (At a consistent temperature of 25°C, 80% of its nitrogen will be released over a 360 day period)
Release Mechanism	Gradually release through diffusion

## Nutrient Composition

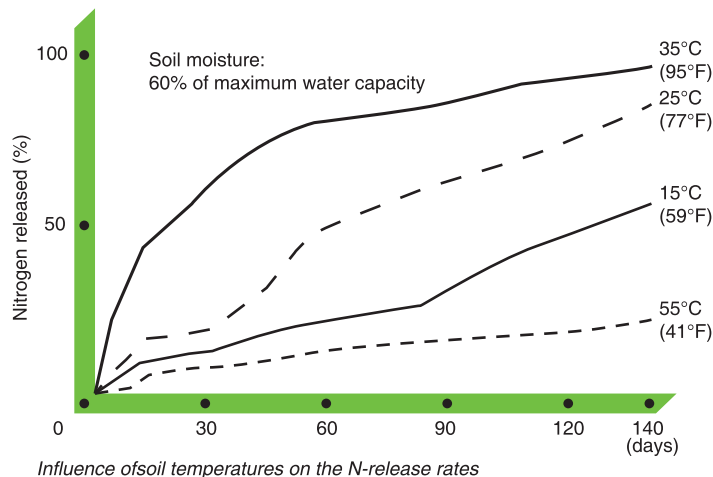
Type of Nutrient	Specification (%)		
	14/13/13	13/11/11/2+ME	18/6/82+ME
Nitrogen	14	13	18
Ammoniacal Nitrogen	8.5	7.8	9.7
Nitrate Nitrogen	5.5	5.2	8.3
Phosphate	13	11	6
Potassium oxide	13	11	8
Magnesium oxide	-	2	2
Boron	-	0.02	0.02
Copper	-	0.05	0.05
Iron	-	0.20	0.20
Manganese	-	0.06	0.06
Molybdenum	-	0.02	0.02
Zinc	-	0.015	0.015
Sulphur	4	5	4
Chlorine	<4	<1	<1



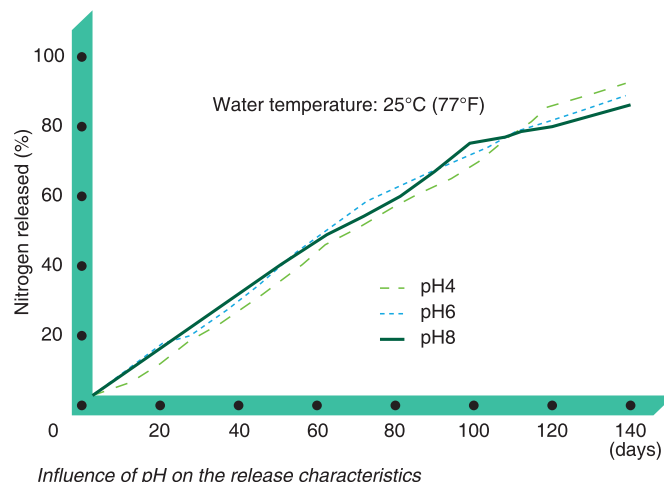
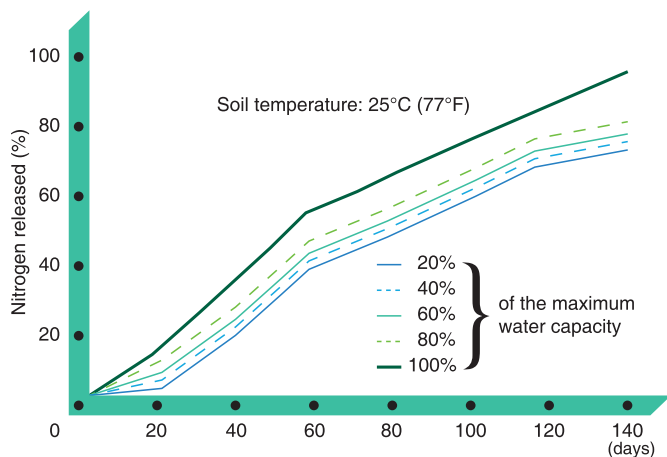
**AgCOTE** can supply nitrogen required through gradual release and meet the requirement of plant growth cycle.



The rate of release of **AgCOTE** is affected by temperature, with higher releasing rate at higher soil temperature.

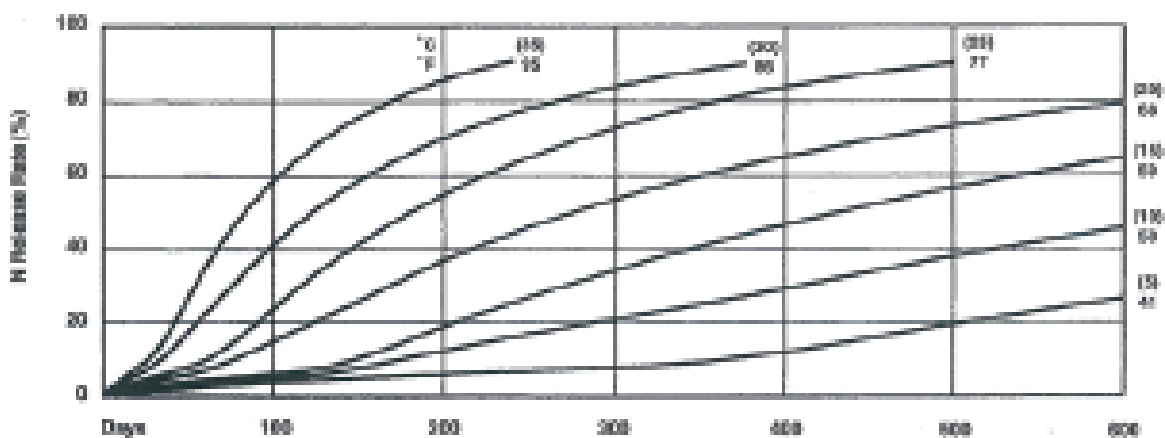


The nutrient release of **AgCOTE** is not significantly affected by soil moisture and soil pH.



### N release rate at 25°C, 30°C and 35°C (Type 360)

At the end of the releasing period, 80% of nitrogen will be released from the granule. Due to the “decay period” characteristic of all membrane-coated CRFs, as long as the membranes do not disintegrate, the last 20% of the fertilizers are released over a “too-long” period, sometimes beyond the window of release desired by the plant.



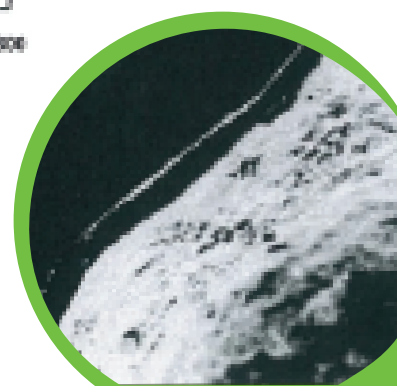
### Nutrient release of **AgCOTE**

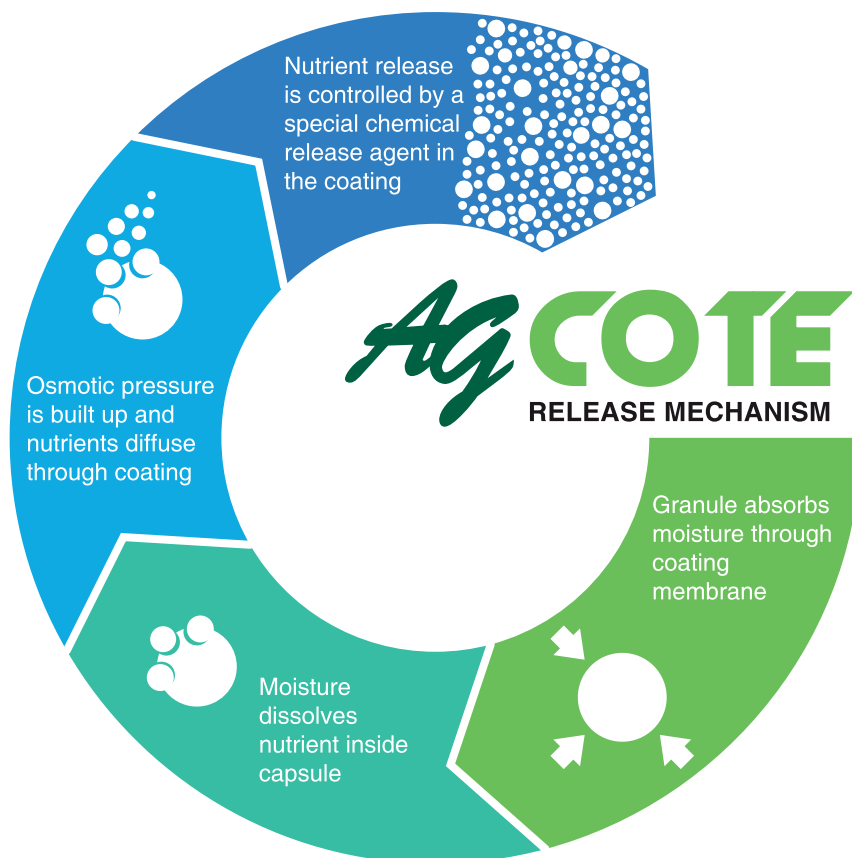
- Moderately affected by temperature
- Not significantly affected by soil moisture levels
- Unaffected by soil type or soil pH
- Does not depend upon microbiological decomposition for its action.

### Coating of **AgCOTE**

- Coat formed by resin
- Microscopic holes of about 0.1 micron
- Nutrient are gradually released by diffusion

Axial section of a coated fertilizer





## Formulations

14/13/13 **T100**

13/11/11/2+ME **T270**

18/6/8/2+ME **T360**

## Fertilizer Recommendation using **AgCOTE**

Crops	Stage	Age	Formulations	Dosage (g/tree)	Longevity
Oil Palm	Pre-nursery	1 - 3 months	14/13/13	5	3 months
	Main Nursery	4 - 12 months	13/11/11/2+ME	50	9 months
	Immature	1 year old	18/6/8/2+ME	500	1 year
Rubber	Nursery	1 - 5 months	18/6/8/2+ME	15	5 months
	Immature	1 year old	18/6/8/2+ME	100	1 year
Cocoa	Nursery	1 - 5 months	18/6/8/2+ME	15	5 months
	Immature	1 year old	18/6/8/2+ME	100	1 year
Tea	Nursery (Seed propagation)	1 - 9 months	13/11/11/2+ME	5	9 months
	Nursery (Cutting)	1 - 12 months	18/6/8/2+ME	5	1 year
	Immature	1 year old	18/6/8/2+ME	20	1 year
Fruity Vegetable	Immature	1 - 3 months	13/11/11/2+ME	50	2 months
Fruit Tree	Immature	1 year old	13/11/11/2+ME	100	6 months

\*Longevity is based on the number of days to be taken for 80% of nitrogen to release into cultivated soil with soil temperature of 25°C (77°F).

Distributed by:



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