



## TECHNICAL INFORMATION

# NUTRICOTE® CRF



CONTROLLED  
RELEASE

### INFORMATION

Nutricote solves many of the problems formerly associated with slow release fertilizers

#### UNIQUE NUTRICOTE QUALITIES:

- + Nutricote is a true Controlled Release Fertilizer
- + True control of nutrient release so the grower gets the most economical use of his fertilizer investment
- + With Nutricote, leaching of nutrients is minimized so optimum fertilizer levels are maintained
- + Highest degree of crop safety
- + Flexibility in periods of releasing, ranging from 40 to 540 days
- + Only the highest quality N, P, K components
- + Resin coating is very smooth and uniform with no breaks or cracked material so no uncontrolled release of nutrients
- + Particle size is very consistent allowing easier and more precise mechanical distribution
- + Higher nitrate nitrogen content in comparison to most other coated fertilizers
- + Nutricote provides a consistent precise release of nutrients according to your plant's nutritional needs

### WHAT IS NUTRICOTE?

Nutricote is manufactured by coating nitrate compound fertilizers with a special resin. The duration of releasing nutrients is controlled by the composition of the resin and the quality of a special "chemical release agent" added to the resin. The special release agent has resulted in a dramatic technological improvement in the consistency and precision of nutrient release

The composition of Nutricote's resin and the release controlling agent added to it produce molecular passageways in the coated resin in a maze-like structure. When Nutricote is applied to the soil, the water in the soil enters the granule through the passageways and dissolves the nutrients. The nutrient solution will then be controlled released steadily through the same passageways

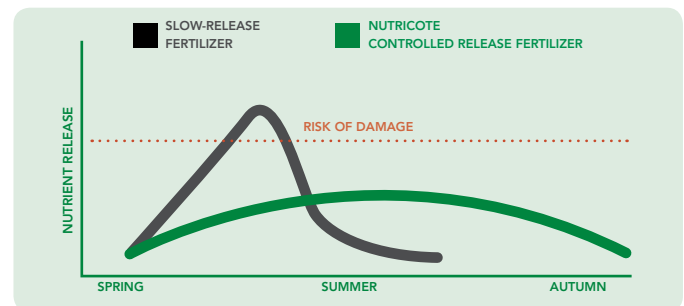
Other slow release fertilizers depend on the thickness of their resin coating to control the release period. This results in a wide variation in particle size and a dependence on the physical properties of the granule for consistent release. It limits the range of release periods available and also contributes significantly to the weight and cost of the product

### THE FINEST CRF

Only the amount of the special release agent in Nutricote's resin coating varies according to the required period of release. This special release agent is what controls Nutricote release

The coating thickness is the same for all release types. All Nutricote granules are uniform. This results in uniform crops of excellent quality

Nutrient supply through Nutricote nicely matches the physiology of plant response to temperature. The release rate of Nutricote is not significantly influenced by soil moisture levels. This release is also unaffected by soil type or soil pH and Nutricote does not depend upon microbiological decomposition for its action



### FEATURES AND BENEFITS

#### PATENTED RESIN COATING USING A UNIQUE CHEMICAL RELEASE AGENT

- + Extremely consistent fertilizer release
- + No flash release of salts, so it's safer under extreme conditions
- + Even in hot climates, will provide controlled long term release

#### COATING IS THIN AND PLIABLE

- + Doesn't crack or break during mixing
- + Fertilizer dollar is spent on fertilizer, not thick coating

#### HIGHEST-QUALITY COMPOUND FERTILIZER

- + Maximum fertilizer value for dollar
- + No harmful impurities
- + More readily available to plants

#### HIGH NITRATE CONTENT IN ALL FORMULATIONS

- + Optimum nutrient availability under all growing conditions
- + Preferable in soilless media

#### PRECISE RELEASE DATA AVAILABLE

- + Ability to modify usage to crop conditions, thereby maximizing production
- + Even under extremely hot growing conditions, length of release is predictable

#### WIDE RANGE OF RELEASE TYPES

- + 2 or 3 Nutricote release types can be custom blended by Florikan into one product based on the grower's individual growing conditions
- + Minimizes requirement for Top-Dress

# NUTRICOTE® CONTROLLED RELEASE FERTILIZER

## FEATURES

- + 100% Controlled Release Homogenous Fertilizer
- + Coating Technology Provides Predictable Release
- + Coating Designed to Release in 40 to 540 Days
- + Total Package of N-P-K and Micros in Every Prill
- + Water Soluble Micro-Nutrients in Every Prill
- + High Percentage of Nitrate Nitrogen

## BENEFITS

- + Consistent and Dependable Performance
- + Will Not Flash Release
- + Matches Longevity to Crop Cycle
- + Uniform Crop Quality in Size & Color
- + Maximizes Nutrient Uptake
- + No Urea/NH<sub>4</sub> Conversion – Reduces Burn Potential

## UNDERSTANDING THE FERTILIZER LABEL

Avoid incorporating urea nitrogen in the soil especially on young or sensitive plants. Review the next page on the soil nitrification cycle in this Technical Product Guide

## RELEASE TYPES

Nutricote release types have certain delays prior to complete activity. At an average daily temperature of 77°F the fertilizer begins releasing according to the following chart by release type

RELEASE TYPE	APPROX. # DAYS TO BEGIN RELEASE
Type 70	3-5 days
Type 100	7-10 days
Type 140	14-20 days
Type 180	3-4 weeks
Type 270	4-6 weeks
Type 360	6-8 weeks
Type 540	12-16 weeks

## FRONT CHARGE

Nutricote Type 70 day or Florikan Nutri-Start 13-6-8 can be used as a front charge to compensate for the initial delay

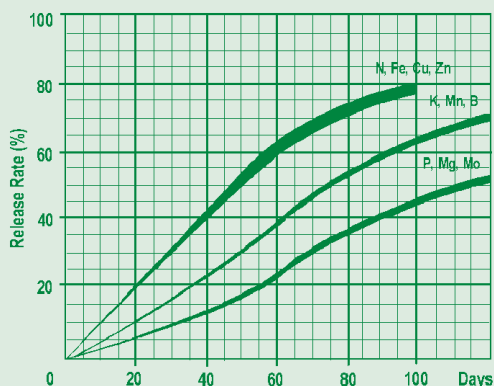
## TOP-DRESS, SUB DRESS, OR INCORPORATE

Nutricote can be used as top-dressing, sub dressing, or incorporated. However when top-dressed, Nutricote takes longer to reach optimum feeding levels than if incorporated. If drip irrigation is used with a top-dressed controlled release fertilizer, the fertilizer must be applied evenly on soil surface and covered with soil

## VERIFY PRILL COUNTS

A controlled release fertilizer performs only as well as it is mixed through the soil. Growers should verify prill counts in incorporated mixes. Use three or four samples of a given soil volume and compare actual prill count to the Nutricote prill count chart for specific soil volume. Match the incorporated rate to the prill count

## NUTRICOTE TOTAL NUTRIENT RELEASE PATTERN



## COOLER TEMPERATURES

If average temperature is less than 77°F ask your Florikan Technical Sales Rep to evaluate which Nutricote release type would be most appropriate for use in your growing area

## STEPPING UP PLANT MATERIAL

Use Florikan blends when "stepping up". When stepping up from a three gallon to a seven gallon, almost 40% of the soil will not have fresh fertilizer. Sub dressing with a Florikan blend is a recommended application for step up

## EC READINGS

Lower EC readings will result with Nutricote Controlled Release Fertilizer than with "slow release" competitive products. Nutricote's steady release results in fertilizer being efficiently taken up by the plant. Nutricote has been proven crop safe by the growers who use it. Nutricote will not flash release

## FLORIKAN GRANULE COUNT

In order to ensure that proper incorporation of Nutricote has been done, small samples of a soil mix can be taken and Nutricote granules counted. Compare the sample count, or preferably the average of several sample counts, with the values in the following chart

Actual number of Nutricote granules per lb. = 9,000; per kg. = 20,000

RATE OF INCORPORATION	PER 100CC OF SOIL	PER 500CC OF SOIL
7 lb/cu. yd.	8	40
10 lb/cu. yd.	12	60
12 lb/cu. yd.	15	75
15 lb/cu. yd.	18	90
17 lb/cu. yd.	20	100
20 lb/cu. yd.	24	120