

LOW BIURET UREA

What is a low biuret urea fertilizer?

This is a kind of water soluble fertilizer with low biuret urea (46% Nitrogen) content used for nitrogen deficiency in plants. Its formula is $\text{CO}(\text{NH}_2)_2$. It contains 46% urea nitrogen. As it is soluble in water it can easily be applied by a sprinkler or via leaves. Physical and chemical properties of low biuret urea fertilizer are given below.

Nitrogen (NH_2) content 46%

It has low biuret content.

Amount of insoluble particles <0,005%

Moisture <0,2%

Its appearance is white and is made of small granules.

It causes no problems for mixtures. It may be mixed with other fertilizers.

Yet a mixture test in a small area of land is suggested before use.

What are the advantages of low biuret urea?

When high doses of nitrogen have to be given via leaves especially in certain seasons, nitrogen to be provided has to have organic origins with no toxic side effects. Most feasible source of nitrogen is therefore urea.

Biuret is a toxic side product of the production process of urea fertilizers. The biuret content of ordinary urea fertilizers that are utilized as subsoil fertilizers is around 1-2%. When such an ordinary urea fertilizer is given via leaves, phytotoxicity occurs in plants. If low doses are used, then high nitrogen needs of plants are not met. As a result when we have to apply urea fertilizers via leaves, or when high and fast doses of nitrogen have to be applied, biuret content in such urea fertilizers has to be low.

Nitrogen composition in low biuret urea fertilizers are organic amines. This is a leaf fertilizer that can be easily applied to plants, which are sensitive to biuret.

Plants	Via leaves (Could be applied together with agricultural disinfection procedures)	Via land/sprinkler
lowers		Planting seedlings - Budding: 200 gram/1/10 hectare/days Budding - Flowering: 200 gram/1/10 hectare/days Flowering - Harvest: 200 gram/1/10 hectare/days Flower - Fruit: 300 gram/1/10 hectare/days
citrus	3-4 kg should be dissolved in 100 liters of water. Dimensions should be as large as a hazelnut or walnut.	Fruit – Growth of fruit: 500 gram/1/10 hectare/days Growth of fruit-Color change: 200 gram/1/10 hectare/days Flowering - Fruit: 300 gram/1/10 hectare/days
vineyard	2-2,5 kg should be dissolved in 100 liters of water and should be given when grapes are unripe and colors of grapes change.	Fruit – Unripe fruit: 400 gram/1/10 hectare/days Unripe fruit-Color change : 200 gram/1/10 hectare/days Planting seedlings - Flowering: 200 gram/1/10 hectare/days
Cotton	2 kg is dissolved in 100 liters of water and given in flowering and raking seasons.	Flowering- Fruit: 600 gram/1/10 hectare/days Fruit – Color change: 300 gram/1/10 hectare/days Planting seedling - Flowering: 200 gram/1/10 hectare/days

Tomato	2 kg is dissolved in 100 liters of water and given when fruits start to be seen and then when fruits start to grow and before flowering.	Flowering - Fruit: 600 gram/1/10 hectare/days Fruit – Color change: 300 gram/1/10 hectare/days Planting seedlings - Flowering: 200 gram/1/10 hectare/days
Cucumber	2 kg is dissolved in 100 liters of water and given when fruits start to be seen and then when fruits start to grow and before flowering.	Flowering - Fruit: 600 gram/1/10 hectare/days Fruit – Color change: 300 gram/1/10 hectare/days Planting seedlings - Flowering: 200 gram/1/10 hectare/days
Pepper	2 kg is dissolved in 100 liters of water and given when fruits start to be seen and then when fruits start to grow and before flowering.	Flowering - Fruit: 600 gram/1/10 hectare/days Fruit – Color change: 300 gram/1/10 hectare/days Planting seedlings - Flowering: 200 gram/1/10 hectare/days
Melon	2 kg is dissolved in 100 liters of water and given when fruits start to be seen and then when fruits start to grow and before flowering.	Flowering - Fruit: 600 gram/1/10 hectare/days Fruit – Color change: 300 gram/1/10 hectare/days Planting seedlings – Flowering: 200 gram/1/10 hectare/days

Watermelon	0,5 kg is dissolved in 100 liters of water and given twice during development of the plant waiting for 15 days before the second application.	Flowering - Fruit: 600 gram/1/10 hectare/days Fruit – Color change: 300 gram/1/10 hectare/days May - July: 600 gram/1/10 hectare/days August - October: 400 gram/1/10 hectare/days Flower - Fruit: 300 gram/1/10 hectare/days
Bananas	3-4 kg is dissolved in 100 liters of water and should be applied before color change.	Fruit – Growth of fruit: 500 gram/1/10 hectare/days Growth of fruit – Color change: 300 gram/1/10 hectare/days Every watering till milk formation stage:: 500 gram/1/10 hectares 1 - 2 years: 100 gram/seedling 3 - 4 years: 200 gram/seedling It should be applied in the first watering.
Fruit trees		
Fruit hoots		

Application method:

Low biuret urea fertilizer may be applied with sprinkler or via leaves. The below given methods are recommended for applications via sprinklers or leaves.