

## U-MIN Neem coating agent for Urea

### Introducing U-MIN

UREA, a nitrogenous fertilizer is a major nutrient component in Agriculture and it is estimated that 50 - 70% of Urea is lost from the soil due to leaching, run off, volatilization and denitrification in field application.

To reduce the nitrogen loss and to increase the urea efficiency, Indian Scientists have conducted various research trials on different crops at different locations and concluded that when Urea is coated with Neem bitters, nitrogen loss reduces by 30-35% by minimizing the leaching and denitrification. Yield increases upto 25% is also recorded.

The research reports have highlighted that, Neem coating of Urea is superior to other denitrifying coating agents like lac and tar.

### Mode of Action

The neem bitters present in U – MIN inhibit nitrification of urea, resulting in prolonged release of nitrogen to the plant after application to soil.

When urea is coated by U-MIN, a thin golden yellow colour forms and prevents nitrogen loss by leaching, ammonia volatilization and denitrification and thus reduces the fertilizer consumption by about 25%.

U-MIN contains enriched neem bitters which have excellent pesticidal properties also. U-MIN coated Urea when applied in Rice fields, the neem bitters form a thin layer on the surface of water thereby repel hoppers and other insects.

### Method of Application

Mix 500 ml U-MIN with 500 ml of water and spray evenly on 50 Kg. Urea or any other fertilizer spread on poly sheet

For best results use U-MIN coated Urea after 2-3 hours of coating.

### Target Use

Nitrogen use efficiency , Pest repellent

## Crops

U-MIN can be used for coating Urea which is suitable for application on Cereals , Millets , Pulses, Oilseeds, Fibre Crops , Sugar Crops , Forage Crops , Plantation crops ,Vegetables, Fruits, Spices , Flowers , Medicinal crops , Aromatic Crops , Orchards and Ornamentals.

## Compatibility

U-MIN coated Urea is compatible with all conventional fertilizers

## Shelf Life

U MINis stable for a period of 24 months from the date of manufacturing.

## Mass Composition

CONSTITUENT	W/W %	FUNCTION
Neem bitters	85%	Active
Diluants		q.s.
Inactive		
BIOLOGICAL COMPOSITION		
CONSTITUENT		POTENCY
Neem bitters		-
Free from Salmonella, Shigella , E.Coli		

## Cautions for handling and use of product

1. Direct incidence of U- MIN on eyes may be irritating. It is suggested that the operator wears eye goggles, face mask and protective clothing while handling the product.
2. Do not dispose in stagnant water / flowing water where there is a possibility of causing pollution to natural resources.
3. Do not eat / drink / smoke during formulation.

## Symptoms and Antidotes

**Symptoms:** Occasional symptoms include head ache and nausea.

**Antidote:** In the case of ingestion: symptomatic treatment is advised. In the case of contact with Eyes: Flush with water liberally for 20 minutes. In case of Skin contact, wash the affected area with plenty of water and soap.

### Citations

There are many citations in public domain on effectiveness of Neem coated Urea.

### Commitment to Nature

- U-MIN is safe to natural parasites, pollinators and predators.
- U-MIN can be used as an effective component in INM/IPM programmes, thereby leading to efficient use of chemical fertilizers and creating a safer environment.
- U-MIN does not lead to residue problems and doesn't cause resistance or resurgence problems.

### Benefits from U-MIN

- U-MIN coated urea minimizes Nitrogen loss owing to leaching /volatilization/denitrification
- Neem coated urea also acts as a pest repellent.