



# NEELAM AQUA & SPECIALITY CHEM. (P) LTD.

(ISO 9001:2008 COMPANY)



**Fertilizer Quality Improvement**



**W**ith the growing concern for quality improvement in every field and for every commodity, fertilizer is no exception. To improve fertilizer characteristics like anti-caking property, granule strength and free flowing nature, the new generation chemicals of **Neelam Aqua** have made the most innovative contributions. These products are a result of 38 years of R&D and continuous usage in fertilizer plants. Their effectiveness, economy and environ friendly qualities are bringing a major breakthrough in fertilizer quality improvement.

**Neelam Aqua**, an ISO 9001 company, was established in 1980 by Dr. Suresh Singh an eminent scientist having 50 years experience in the R&D of fertilizer industry. **Neelam Aqua** is well established in the Indian Fertilizer Industry for providing fertilizer quality improvement chemicals and other speciality chemicals.

Supported by it's R&D of more than thirty years **Neelam Aqua** offers most advanced technology tailor-made solutions for fertilizer quality problems like caking,dust and fines, non - uniform coloration and lumping of prills / granules.



Our R&D centre has added latest formulations in each product range which are found to be the most efficient and economical products around the globe without any close substitute. All the products are user friendly, safe and environment friendly. There is no risk or health hazards to users & operators.



## ANTI-CAKING AGENTS

To keep fertilizer granules / prills free flowing **Neelam Aqua** offers a wide range of anti-caking agents for fertilizers like Urea, ANP, CAN, AN, DAP, NPK & other phosphatic and complex fertilizers. For phosphatic and complex fertilizers, NEELCOAT range of formulations and for Urea, URECOAT range of formulations are available. Fertilizer coated with these anti caking agents remains free flowing even after long duration of storage under high temperature and pressure in adverse climatic conditions. These Anti-caking agents are easy to use formulations, which can be conveniently sprayed on granules/ prills over a moving conveyor or at transfer points, or inside a coating drum. Apart from the anti-caking effect, these coating agents also function as dust suppressors. They change the post-production crystal forming tendencies thus checking the crystal bridging, caking and dust generation. They are generally dozed in the range of 0.2 to 0.5 kg per ton of fertilizer.



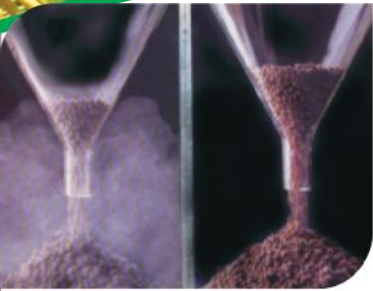
## GRANULATING AIDS

To improve the crushing strength and to reduce fines and dust generation NEELOFIX granulating aids are the best products for complex and phosphatic fertilizers. In Urea manufacturing, adding UREFIX as a granulating aid gives higher prill strength and reduces dust emissions from the prilling tower and inside the plant area. Higher prill strength ensures prills of good shape and size, without fines and dust. These granulating aids are dozed in very small quantities and hence proves to be very economical.

## DEFOAMER

**Neelam Aqua** offers non-silicon based defoamers for phosphoric acid manufacturing plants. NEELCO formulations are advanced technology defoamers, which are dozed in very low quantities and give excellent defoaming results.





### DUST SUPPRESSORS

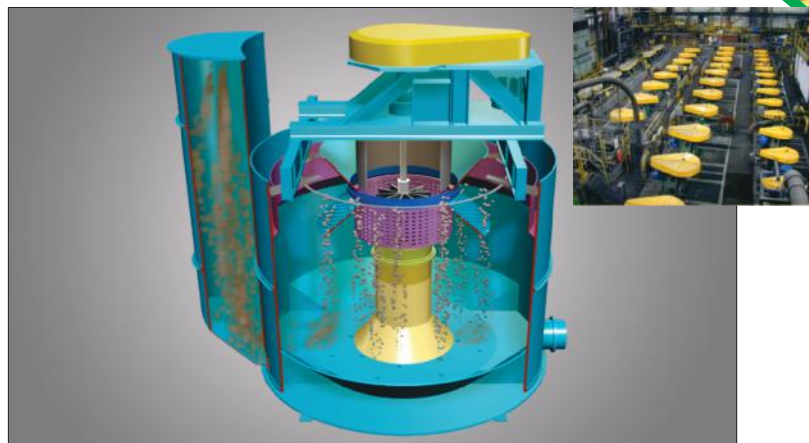
Dust generation during and after granulation / prilling creates problem in the plant as well as in the bagging and storage department. **Neelam Aqua** offers **NEELCOAT** series of coating chemicals to overcome the problems arising due to dust generation.

### FROTH FLOTATION

**Neelam Aqua**, manufacturers froth floatation agent for the beneficiation of phosphate, potash and a variety of ores. These Flotation agents are tailor made to suite the customer specific requirements.

They are easier to dose. The flotation agents manufactured by **Neelam Aqua** are a blend of latest technology polymers which gives efficient flotation at low dose rates.

In addition to the supply of these products, **Neelam Aqua** also provides customized solutions for the Mining Industry. The Company also manufactures specialized High Molecular weight flocculants for clarification of process water.



### COLOURING AGENTS

**Neelam Aqua** offers NEELCOAT-CL series of colouring agents to give a distinctive brand image to fertilizers. These colouring agents can be incorporated with any of the above speciality chemicals or can be applied separately also, as required.

### SLOW RELEASE OF NITROGEN

**Neelam Aqua** manufactures compounds- Neelcoat 1N 1000- for the slow release of Nitrogen. These compounds are suitably blended with the nitrogenous fertilizer.

It delays the hydrolysis of Nitrogenous fertilizer and makes nutrient available to the plants over a long period of time.

The excessive build up of ammonia is reduced. Also, the nitrogen loss through ammonia volatilization is reduced. The continuous & steady uptake of nitrogen by the plants results in higher crop yield.

Our customers are our partners in problem solving because the conditions vary from plant to plant and since the optimum results depend on correct treatment. Hence, we at **Neelam Aqua** believe in adopting the scientific approach.





On the basis of detailed analysis of the problem, the most suitable product/ formulation is recommended for usage. For typical problems, the case is referred to R&D laboratory, which carries out laboratory trials and pilot plant studies to find the best solution. Accelerated caking test, dusting behavior, defoaming test and prill strength determination are some of the frequently carried out tests.

## **NEELCOAT N M L**

### **Coating Agent for UREA (NEEM OIL Based)**

Urea is the major source of Nitrogenous fertilizer world wide. However, a large part of the Nitrogen from Urea is lost and does not add to the nutrient value.

With the increasing cost of Urea production, it is becoming important to save and judiciously use every part of the urea prill.

“Nitrogen from Urea is released in the soil and leached by activity of nitrifying bacteria Nitrobacter and Nitrosomonas. These bacteria turn nitrogen in nitrite and then into nitrate which are highly mobile in nature when present in soil. By these processes approximate 50% to 65% of nitrogen provided by urea is lost.

Solution to this problem of nitrogen loss from urea is to coat the urea with “NEELCOAT N M L”

### **Why to use “Neelcoat N M L” as urea coating agent?**

“Neelcoat NML” is a proven nitrification inhibitor. It slows down the process of nitrogen release from urea. It is the best nitrification inhibiting agent available till date.

### **Advantages of using “Neelcoat N M L” in Urea**

1. Slows down the process of nitrification of urea.
2. Enhances the yield by 48%.
3. Decreases urea requirement, hence economical.
4. “Neelcoat NML” urea effects slow release of nitrogen during the critical phases of growth.
5. Controls nematodes, termites, pests and insects.
6. Excellent soil conditioner and Natural Bio Pesticides.
7. Environmental Friendly and Non Toxic.
8. Reduces Urea Consumption.
9. Convenient and easy to apply.
10. **Packing** “Neelcoat NML” is packed in tanker load / IBC / Barrels.

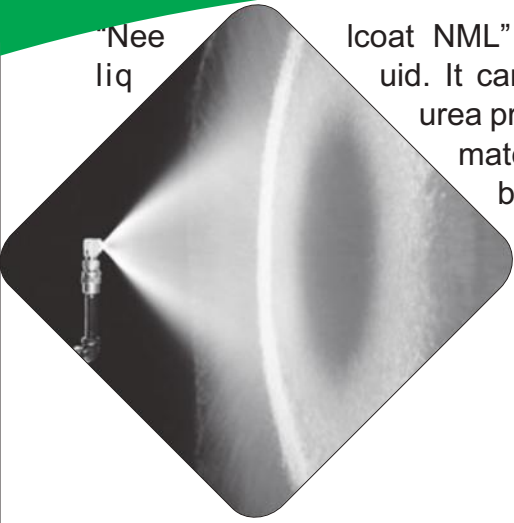
## **Methods of Application**





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“Neelcoat NML” is a free flowing liquid. It can be easily sprayed on the urea prill. The product can be applied on the material transfer points and also on the conveyor belts . The doze can be precisely monitored using doze metering pumps. Complete dozing pump, tank and other monitoring instruments are supplied by Neelam Aqua & Speciality Chem.



### Technical Services

Technical Services are an integral part of the products manufactured and supplied by Neelam Aqua & Speciality Chem. Our Chemists & Engineers give complete support services in the usage of “Neelcoat NML”. Also, our senior technologists give complete training on the application and advantages of Neem Coated Urea.

Our technical services team ( [support@neelamaqua.com](mailto:support@neelamaqua.com), Ph. : +91-141-2333418, 2333718 Fax : +91-141-2331102, Cell : 0091-9829069545) is always in constant touch with the user plant for product dosing, monitoring and feed back data reporting.



# Fertilizer Quality Improvement Chemicals

By

## NEELAM AQUA

Anticaking Agents



### Neelcoat

For NPK, DAP, CAN,AN, ANP, AS  
and other phosphatic & Complex  
Fertilizers

### Urecoat

For urea

Granulating Aids



### Neelofix

For NPK, DAP, CAN,AN, ANP, AS  
and other phosphatic & Complex  
Fertilizers

### Urefix

For urea

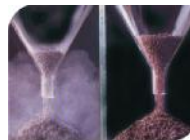
Defoamers



### Neelco

For phosphatic Fertilizers &  
Phosphoric Acid Plants

Dust Suppressors



### Neelcoat DS

For NPK, DAP, CAN,AN, ANP, AS  
and other phosphatic & Complex  
Fertilizers

Colouring Agents



### Neelcoat-CL

For NPK, DAP, CAN,AN, ANP, AS  
and other phosphatic & Complex  
Fertilizers

Neem Oil



### Neelcoat NM L

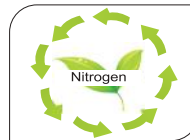
Nitrification inhibitor for Urea

# Fertilizer Quality Improvement Chemicals

By

## NEELAM AQUA

Slow Release of N<sub>2</sub>



### Neelcoat 1N 1000

Urease and Nitrification inhibitor

Flocculants



### Neelfloc

Cationic, Anionic, Nonionic

Micro Nutrient Binders



### Neelcoat

Micronutrient fixer for zinc, Boron, Manganese, iron etc.

Mineral Beneficiation



### Neelco

Froth Flotation Agent

Diatomaceous Earth



### Diatomaceous Earth



## NEELAM AQUA & Speciality Chem. (P) Ltd.



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