



guptaanand/ABG
13.04.2005 06:22 PM

To dwivediajai/ABG@ABG
cc
bcc
Subject Fw: High Biuret Contents in Urea Prills

For records please

Anand K. Gupta

----- Forwarded by guptaanand/ABG on 04/13/2005 06:21 PM -----



duttack/ABG
04/13/2005 12:30 PM

To lino.carlessi@snamprogetti.eni.it
cc
Subject High Biuret Contents in Urea Prills

INDO GULF FERTILISERS LIMITED

JAGDISHPUR INDUSTRIAL AREA,
DISTT: SULTANPUR, U.P., INDIA
Phone: 91 5361 270032 - 38, Fax: 91 5361 270165

13th April, 2005

M/s. Snamprogetti SpA

Italy

Email : lino.carlessi@snamprogetti.eni.it

Attn. : Mr. Lino Carlessi

From : C.K. Datta, Sr. Vice President (Mfg. Oprns.)

Sub. : High Biuret Contents in Urea Prills

You may recall our earlier communication regarding high biuret content in urea prills.

In line with your recommendations given in past, we have optimized operating parameters such as solution temperatures at the outlet of stripper, medium pressure section and low-pressure section. We are also closely monitoring liquid level in the vessels so as to avoid any hold-up. The urea melt temperature to the prill bucket is maintained at around 136°C. Despite all these actions, we are not able to reduce the biuret content to less than 1.05 ppm.

We have also observed that biuret shoots up occasionally to 1.10 ppm on its own without any changes in operating parameters of the plant. We feel that this may be due to dislodging of polymers accumulated in 1st vacuum separator (MV-06),

which goes along with the urea melt consequently increasing the biuret content suddenly.

We had taken shutdown of one urea stream in December 2004 for carrying out stripper repair. That time MV-06 and MV-07 were inspected from inside and lot of accumulation of polymer was found on the shroud installed in MV-06. We are of the opinion that this SHROUD, provided adjacent to liquid inlet nozzle in MV-06, is acting as a nucleus for polymer deposition.

Therefore, we were exploring possibility of removing this shroud in MV-06 so that polymer deposition can be minimised. We are attaching schematic drawing for MV-06 for ready reference. We would like to know from you whether the shroud provided in MV-06 can be removed to avoid deposition of polymer?

Further, we are in the process of developing Sulfonated Urea on pilot scale by injecting molten sulphur in molten urea at MV-06/MV-07 outlet. In this connection, we would also like to know from you whether injection of molten sulphur (2%) in urea process will create any harm to the equipment and the process.

An early reply shall be highly appreciated.



MV-6.ppt

Best Regards

C.K. Datta