

Annexure - I

SYNTHETIC FLOCCULENT FOR FILTRATION OF LEACHED URANIUM SLURRY

The required synthetic polyacrylamide powdered flocculent is to be added to acidic (pH 1.5 – 2.0) silicious uranium ore slurry containing 60% solid w/w (65% solid particles passing through 200 # and 1 % retained on 48# and rest in between) in conjunction with Guar Gum Powder as 0.05 % solution to flocculate the feed leached slurry in the flocculator for its filtration in the rotary vacuum drum filter operating under a vacuum of 600 mm of Hg.

Other details are:

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| 1. Specific Gravity of Solids | 2.8 |
| 2. Specific Gravity of Liquor | 1.05 |
| 3. Temperature of Slurry | 40 – 55 °C |
| 4. Acid used to maintained pH | Sulphuric Acid |

Important Note:

1. Fluctuant Used in Plant: Magnafloc-351, Flomin – 4947, DK SET P-7003.
2. Material should be supplied in original packing.
3. Material should be supplied in 20 – 25 Kgs. properly packed packets only.

Ginko

Selection Criteria

- A) 50 gms. of sample along with detail leaflet of product containing its viscosity, toxicity, shear rate, molecular weight, chain length etc. is required to evaluate the offer without which offer may be rejected.
- B) Only solid powder flocculent is acceptable. Emulsion or gel etc. is not acceptable.
- C) Sample not performing well in lab. testing will be rejected.
- D) Offer without sample & leaflet shall be rejected.
- E) Comparative performance test between existing plant flocculent and offered flocculent samples with existing plant slurry is performed in a buckner type setup in UCIL lab for determination of time of filtration & volume of filtrate. Sample of flocculent giving poor performance in filtration test as compared to the existing flocculent shall be rejected. The filtration test is performed with 600ml acidic slurry with 55% - 60%(W/W) solids (& other details as mentioned earlier) with a synthetic flocculent dose of 10 ml (0.05% strength).
- F) The acceptance of material will be decided only on satisfactory plant performance of the ordered flocculent.

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(R35) *addl. sup'ds 2 min 1)*