

## TRIAL REPORT – 17.03.2020

### WASTEWATER TREATMENT USING CLEAR TREAT FLOCCULANTS

Effluent : Ultrasonic Part Washer cleaner – 2 weeks old

#### **1. 2311**

Two samples of effluent taken viz. one for treatment with Ph adjustment other without.

##### Sample 1 : Ph – 9.3

Added Sulfuric acid drop by drop till PH reached 4.6. Here floating oil layer had dispersed to some extent.

1.4grams + 1.1gms of floc added – Flocculation observed. Water starts separating. Liquid still hazy

2.5grams added – water starts clarifying but still yellowish

0.8grams – Thick paste like floc layer on top.

Liquid now filtered and all the floc paste trapped on filter, yellow, almost clear liquid filters through.

##### Sample 2: PH – 9.3

No PH adjustment done.

Added 3 grams of floc in 175ml liquid. Further 0.3 grams added later.

Flocculation observed which had settled down.

Upon filtration, near clear yellow liquid found. Color was slightly darker than Sample 1.

Few drops of acid added to this filtered liquid and some white gunk started forming in the liquid. Yellow color quickly turned into a milky white. This liquid was kept in a Paper Glass. The acid may have reacted with the paper? Not sure.

##### Sample 3:

125ml liquid pH adjusted by adding  $\text{H}_2\text{SO}_4$  till about  $\leq 7$  (Litmus paper used)

2.5 grams added.

Good flocculation observed and liquid after filtration was much clearer and less yellow in color.

