

## TURCO<sup>®</sup> Liquid Smut Go NC-B Control Procedure

### A. Concentration Determination

Apparatus:

- Pipette, 5,00 ml
- Iodine flask, 250 ml
- Burette, 50 ml

Reagents:

- Potassium Iodide
- Sulfuric acid, 30% v/v
- Starch indicator solution, 1% v/v
- 0,1 N sodium thiosulfate
- Demineralised water

Procedure:

- Take a sample from the production tank and let it cool down to room temperature
- Transfer 5,00 ml to an iodine flask containing approximately 50 ml demineralised water
- Add 5 ml 30% sulfuric acid and 3 g Potassium iodide
- Mix and place in the dark for 10 minutes
- Titrate with 0,1N sodium thiosulfate till the color turn yellow-orange.
- Add 5 drops starch indicator and titrate until blue color is just discharged
- Record the number of ml's sodium thiosulfate used. (We advise you to duplicate the analyses and take the average result for the calculation)

Calculation:

$$V_{\text{Thiosulfate}} * 1,38 = C_{\text{Smut Go NC-B}}$$

- $V_{\text{Thiosulfate}}$  = Volume sodium thiosulfate added in ml
- $C_{\text{Smut Go NC-B}}$  = Concentration of TURCO Liquid Smut Go NC-B in % v/v

$$(C_{\text{start}} - C_{\text{Smut Go NC-B}}) * V_1 = V_{\text{Smut Go NC-B}}$$

- $C_{\text{Smut Go NC-B}}$  = Concentration of TURCO Liquid Smut Go NC-B in % v/v
- $C_{\text{start}}$  = Start concentration of TURCO Liquid Smut Go NC-B in % v/v
- $V_1$  = Volume of process bath in l
- $V_{\text{Smut Go NC-B}}$  = Volume TURCO Liquid Smut Go NC-B to be added in l

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