



# Production Method

## Synergy 95

### Raw Granular Humic Acids

Date: July 5th 2024

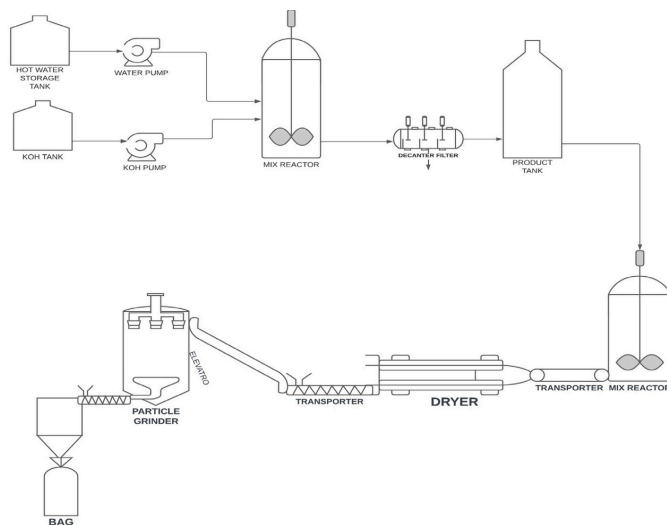
Approved by: Bernier Coto

## 1. DESCRIPTION of MANUFACTURING PROCESS

**Ingredients:** Raw Humalite, Hot Water, KOH, And Sulfuric Acids 93%.

1. Raw humalite is mined offsite at our Alberta deposit
2. Product arrives at Production Facility for initial screening to remove of foreign material.
3. Product is crushed to various particle sizes and Product is dried to approximately 28%-32% moisture. Product is separated according to particle size.
4. Add hot water into mixing tank.
5. Add in the designated rate of KOH.
6. Add Humalite.
7. Perform Quality control tests at the end of the mixing period, (pH, Humic Acid Levels, dissolve rate). If is not at optimal level, adjust and mix the batch accordingly until correct.
8. If batch is at optimal quality control levels, screen mixture a minimum of two times and transfer to settling tanks.
9. Once product has properly settled, mixture is screened again to remove any further solids, and moved to storage tanks. 12.Add sulfuric acid 13.Shake for 5 minutes, let stand for 10 minutes.
10. Liquid material is run through spray drying process to turn liquid humic material into a dry soluble powder.
11. Once dehydrated, pass the product to the particle mill to generate the necessary particle size.
12. Pack the final product in 15kg, 25kg and 1000kg

## 2. Process Flow Diagram



Process Steps

| Item | Definition         |
|------|--------------------|
| 1    | Water Tank         |
| 2    | Water Pump         |
| 3    | KOH Tank           |
| 4    | KOH Pump           |
| 5    | Mix Reactor        |
| 6    | Decanter filter    |
| 7    | Final Product Tank |
| 8    | Sulfuric Acid      |
| 9    | Dryer              |
| 10   | Packing Line       |