

Live Bacteria Comparison to Spore Based Enzymes

- Chemex-33 Drain & Grease Trap Maintainer is a <u>100% live bacteria</u> (pseudomonas), in contrast to enzymes which are spore producing bacteria (Bacillus).
- 2. Chemex-33 Drain & Grease Trap Maintainer is a stabilized formula that performs longer because it adheres to digesting organic matter as its main food source allowing it to maintain a consistent bacteria count. Conversely enzymes are unstable and will continue digesting all matter including its own cells which reduces the total amount of good bacteria and lessens performance.
- 3. Chemex-33 Drain & Grease Trap Maintainer is performance ready and activate upon application. They will burrow into a food source and can multiply into over 2 billion colonies within 24 hours. Enzymes require an activation period that ranges from 8 to 24 hours. Until the enzymes germinate they do not work and are more likely to be washed away.

Time	Chemex-33	Competition Powder	Competition Liquid
0 hours	200 mil cfu/ml	400 million cfu/ml	250 million cfu/ml
18 hours	3 billion cfu/ml	100 million cfu/ml	200 million cfu/ml
24 hours	2.5 Bil. cfu/ml	100 million cfu/ml	200 million cfu/ml

- 4. Chemex-33 Drain & Grease Trap Maintainer is genetically designed to degrade organic material such as animal and vegetable fats, oil and grease. Enzymes are incapable of the same level of degradation of organic wastes and cannot degrade fats, oils and greases beyond the fatty acid state.
- 5. Chemex-33 Drain & Grease Trap Maintainer work in a wide range of conditions that can range on the pH scale from 5 to 9. Enzymes need an environment with a neutral pH otherwise they would remain dormant.
- Chemex-33 Drain & Grease Trap Maintainer <u>do not</u> contain emulsifying agents which is important to municipal water systems. Enzymes have emulsifying agents that separates and moves organic matter into the sewer line where it can either congeal causing a blockage or flow into the waste water stream of the municipality.