
FORMULA 33

Microbial Formulation

For Use In: Municipal and municipal/industrial sewer lines, lift stations, scum pits, grease traps, or other collection systems

Description

Formula-33 contains adapted micro organisms specifically formulated for use in municipal and food production waste-water collection systems. Formula-33 is composed of aerobic and facultative anaerobic micro organisms. These micro organisms have been carefully selected from nature and adapted for optimum performance in diverse waste streams. Formula-33 contains organisms which produce high levels of lipase, amylase and protease for degradation of grease, fats, oils, starch protein and cellulose. Formula-33 also degrades detergents, surfactants, phenolics, waxes and hydrocarbons, all of which are present in municipal waste collection systems. Formula-33 contains no added enzymes, wetting agents, emulsifiers or surfactants. Formula-33's degradation process produces harmless water, carbon dioxide and biodegradable microbial protoplasm, a source of food for higher life forms.

Benefits

Benefits of treatment with formula-33 include: control of grease build-up in sewer lines, which dramatically improves flow, reduces maintenance costs, lowers pipe corrosion due to sulphate, helps control noxious odours and eliminates the need for personnel to handle unsafe chemicals. Grease build up in lift stations, scum pits, and other collection systems is significantly reduced which means easier and less frequent maintenance and clean-out. Proper use of formula-33 will improve treatment plant performance and establish and maintain a biomass in the collection system which is resistant to the effects of organic inhibitors commonly found in waste waters. Formula-33 is packed in water-soluble bags requiring no mixing, measuring or pre-soaking. Formula-33 is completely safe for handling when used as directed and is the strongest formula on the market. Product specification form: free-flowing, granular powder colour: buff to brown specific gravity: 0.5-0.7 contents: 58 strains of micro organisms and growth stimulants (minimum plate count 5 billion cfu per gram) storage: store sealed in a dry area at room temperature not exceeding 40oc do not allow product to become wet or moist prior to use. Do not freeze. Caution: when used in bulk form, inhalation and direct skin contact should be

avoided. Dust protection for eyes, nose and mouth should be used. In event of direct skin or eye contact, flush the affected area with water. If irritation persists, contact your doctor.

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Directions for use

1. Do not add to the treatment system at a location where toxic or otherwise adverse ph, dissolved oxygen or temperature conditions may exist at peak levels.
2. Application rates: consult your representative prior to use for specific instructions.
3. In many cases, it is best used in conjunction with other fine bacterial aids from . Consult your representative with your specific requirements. For optimal results the waste water and treatment system should meet the following conditions:

| | Optimum | Minimum | Maximum |
|--|----------|---------|----------|
| Influent pH | 7.0 | 6.0 | 9.0 |
| Dissolved Oxygen, ppm | 2.0+ | 1.0+ | - |
| C/N/P Ratio | 100/10/1 | 100/5/1 | 100/20/1 |
| Temperature, (C) | 30 | 10 | 40 |
| Toxic Metals, ppm (e.g. Hex chromium) | 0 | 0 | 2 |

Availability

11.36 kg (25lb) plastic pails and 45kg polythene-lined fibre drums. Packaged in 227g water soluble bags or bulk.