

# DRAIN MAINTENANCE GUIDE



**Evans  
Vanodine**  
EST. 1919



# DRAIN MAINTENANCE

## WHY DO DRAINS NEED MAINTAINING?

Effective drain maintenance can reduce the running costs of your business. It is also kinder to the environment and will continue to help the wider drainage system without any environmental damage.

Using a drain dosing unit in conjunction with a product specifically aimed at drain maintenance is the best option for a busy kitchen.

**PRODUCT:** **Drain Clear** is a blend of friendly microbes, nutrients and preservatives. The microbes in **Drain Clear** have been specially selected from many non-toxic naturally occurring microbes as the best solution to treat grease traps and sewer drains that are subject to blockages caused by large amounts of oils, fats, greases and other organic matter passing through them.

The blend of microbes form a bio-film which releases a continuous and renewable supply of highly active enzymes into the water flow for fat, oil and grease degradation.

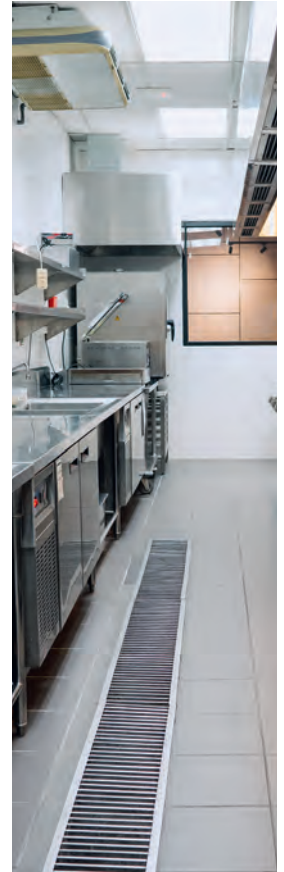
The bio-film adheres to the walls of the grease trap and drainage system and, unlike conventional enzyme systems, is not washed away. **Drain Clear** has a significant resistance to disinfectants and other cleaning fluids.

**APPLICATION:** The primary application of **Drain Clear** is as a maintenance tool to treat fats, oil and grease in the grease trap and to prevent grease and fat build-up in the sewer system.

It is used extensively in places where food preparation and processing produce large quantities of waste water with a high proportion of grease and fat which, if left untreated, can often block or restrict the flow of drainage systems. This causes malodours and unhygienic conditions, which invariably leads to expensive and inconvenient clearing of the drain system.

## LOOKING AFTER YOUR DRAINS CAN:

- Reduce the frequency of grease trap emptying by up to 70%.
- Eliminate the need to use hazardous chemicals.
- Eliminate odours.
- Provide an improved work environment.
- **Drain Clear** will not damage drain walls or bonding.



## PRODUCT

### DRAIN MAINTENANCE

#### Drain Clear

Bio drain and grease trap maintainer



5 L

10 L

- Biological liquid that digests fat and grease.
- Controls odours and helps to prevent blockages.
- Contains naturally occurring micro-organisms to help keep drains clear and free-flowing.
- Safe to handle and eliminates the need to use hazardous chemicals.
- Allows grease traps to work more efficiently and reduce the frequency of emptying by up to 70%, therefore saving money.
- When used on a regular basis it will provide peace of mind that your system will remain free from major problems caused by grease build-ups and blockages.

Drain Clear 2x5 L - A101EEV2

Drain Clear 10 L - A101IEV

## DOSING UNIT

### BATTERY POWERED

#### DrainDose Kompact

Battery operated drain dosing unit



Each

- Designed to use with biological drain dosing systems.
- Password protected, with quick and easy programming.
- Easy to install and simple to maintain.
- Powered by a specially designed long-life battery; with normal use will last up to 12 months.
- Safe for all kitchen and drainage applications.
- Install directly into waste outlet pipes and grease traps.
- Helps to prevent costly, inconvenient blockages and associated unpleasant odours.

DrainDose Kompact - D061AEV

DrainDose Kompact Replacement battery - D180AEV

DrainDose Kompact Adjustable Strap - D061AEV

## DOSING UNIT

### MAINS POWERED

#### Drain Plus

Mains connected drain dosing unit



Each

- Uses the latest technology to ensure reliability.
- Easy to read, backlit display.
- Digital display provides visual verification.
- Easy installation, setting and programming.
- Can be set up for up to 48 daily dosing operations, with a digital display counting down to the next dose.
- Automatically meters exact dosing any time of the day or night, reducing chemical waste.

Drain Plus - A066AEV

# INSTALLATION

## DRAIN DOSING UNIT

### BEST LOCATIONS

A biological drain maintenance system is used to prevent build-up of fats, oils and grease at a particular point in your drainage system. For larger premises it may be necessary to install more than one unit for the system to work effectively.

**NEAR THE MAIN DISHWASHING UNIT:** Most systems are installed close to where the highest volume of fats, oils, and grease (FOGs) enter the drain, often near the sink/dishwasher outlet.

**NEAR THE GREASE TRAP/SEPARATOR:** The system should feed into the waste pipe upstream of the grease trap, allowing the enzymes in **Drain Clear** to break down the grease before it reaches the trap or the main drain line.

**WALL MOUNTING:** The pump is usually wall mounted using a bracket, typically within 4 meters (maximum tubing length) of the discharge point.



### INSTALLATION REQUIREMENTS

#### INJECTION POINT:

The delivery tube from the unit should be connected to the waste pipe, by drilling a hole and inserting the fittings provided.

#### POWER SUPPLY:

While the DrainDose Kompact is battery operated, the Drain Plus unit is mains-powered and should be positioned near a 3 amp power supply.

#### PROTECTION:

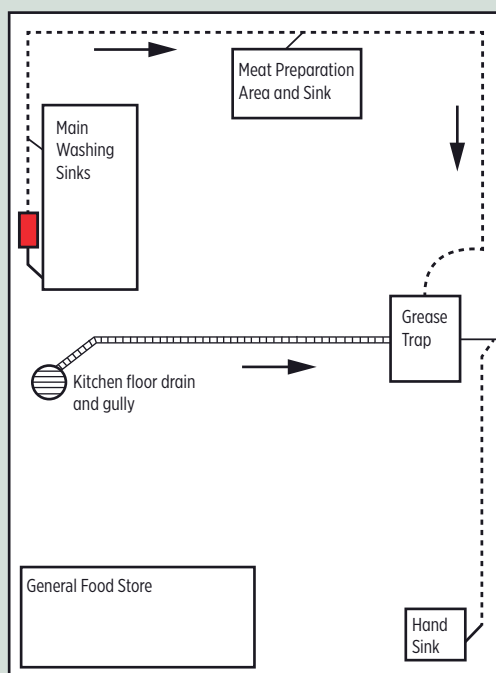
The unit should be fitted away from high traffic areas to prevent any unnecessary damage, but within reach of maintenance staff for replacing the Drain Clear solution and any other required maintenance.

#### TEMPERATURE:

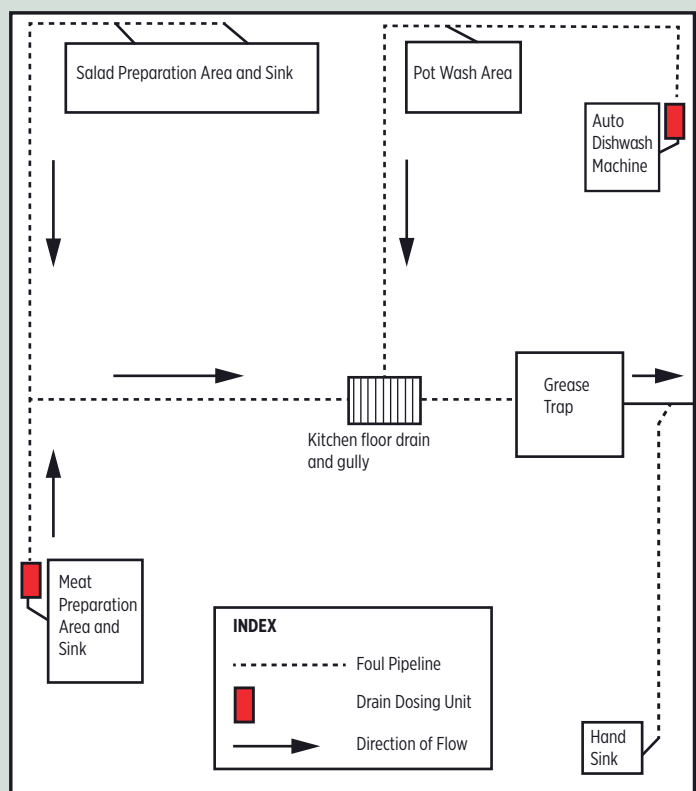
Ensure the unit is installed in a location with a temperature consistently above 10°C but below 55°C for optimal bacterial activity.

## LOCATION EXAMPLES

### SMALL KITCHEN

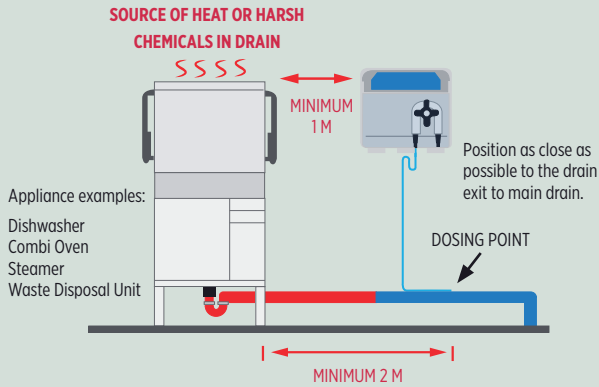


### LARGE KITCHEN

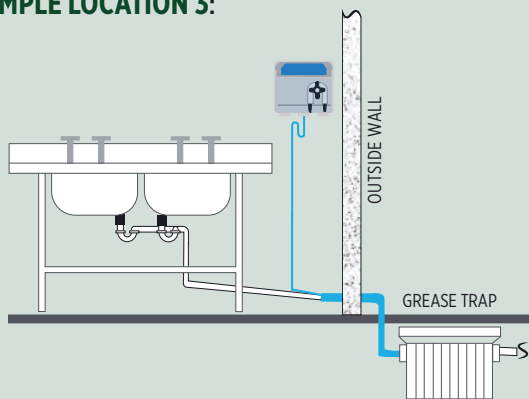


## LOCATION ADVICE

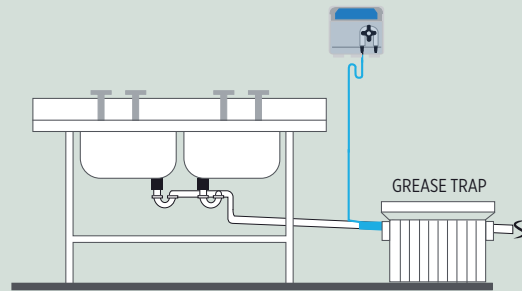
### EXAMPLE LOCATION 1:



### EXAMPLE LOCATION 3:



### EXAMPLE LOCATION 2:



#### EXAMPLE LOCATION 1:

Install the dosing unit a minimum of 1 metre (3.25ft) away from the dosing point and a minimum of 2 metres (6.5ft) away from sources of harsh chemicals and excessive heat in the drain.

#### EXAMPLE LOCATION 2:

If treating a grease trap fitted inside the kitchen, connect the dosing unit as close to the grease trap inlet as possible.

#### EXAMPLE LOCATION 3:

If treating a drainage system or grease trap which is sited outside of the kitchen, connect the dosing unit as close as possible to where the drain leaves the kitchen.

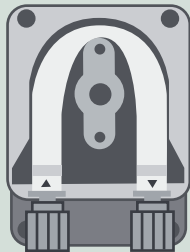
#### DO's and DONTs:

**DO NOT** connect directly to traps.

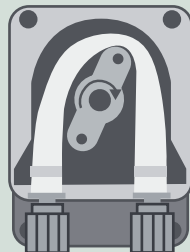
**ENSURE** the dosing tube is supported and fixed in place. **DO NOT** stretch the tube.

**ENSURE** there are no kinks in the tube, make sure the tube is smooth to allow the Drain Clear to run smoothly.

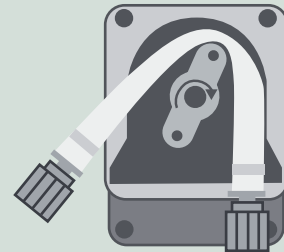
## TUBE REPLACEMENT



Open the pump's lid and release the tube by pulling the left connector upward.



Move the roller by turning it in the direction of the circular arrow, to release tension in the tube.



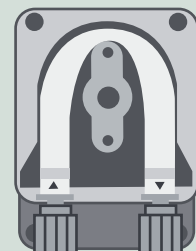
Completely release the left connector, holding it taut towards the outside, and so that the tube is freed up to the right connector.



Completely remove the old tube from the dosing unit, keeping the roller at an angle.



Insert the left connector into the relative housing and pass the tube under the roller's guide, whilst guiding the tube into the pump's head, until the right connector is reached.



Straighten the roller to increase the tension in the tube. Close the pump's lid and press its surface hard so that it is properly locked into place.

## TROUBLESHOOTING

### PUMP WILL NOT ACTIVATE:

- Check the battery. (if using the DD1 dosing unit the replacement battery code D067AEV).
- Check pump output terminals for loose screws and disconnected wires.
- Check for proper voltage across motor terminals.
- Check for obstruction in pump head.
- Check the program time, the quantity and clock time.

### PUMP RUNS TOO SLOWLY:

- Check roller block for binding.
- Check for lubrication on squeeze tube.
- Check pump settings to verify if the parameters are correct.
- Check battery charge status.

### LOSS OF PUMP PRIME:

- Check pickup line for any holes or air leaks.
- Check squeeze tubing in pump for any cracks or pin holes.
- Check suction and delivery tubing to verify if there is any deterioration.



## FREQUENTLY ASKED QUESTIONS

### DOES DRAIN CLEAR CONTAIN LIVE MICRO-ORGANISMS?

The active ingredient in **Drain Clear** is a live bacterium. These bacteria have been selected from nature for specific capabilities and then adapted to maximise those capabilities in drains and grease traps.

### DO THESE MICROBES GROW IN MY DRAINS AND HOW DO THEY SURVIVE IN THE ENVIRONMENT?

An initial “seeding” of the drain/grease trap is carried out in order to introduce the microbes into the system. Large numbers of these microbes then attach themselves to surfaces of the pipe and trap as well as any grease deposits where they continue to consume grease and organics converting them to carbon dioxide, water, and more bacteria.

The microbes that adhere to surfaces continue to grow and thrive in the grease trap. Microbes are protected from short-term exposures to high temperature (when the dishwasher discharges), from pH swings, or from chemical toxicity (when cleaning or sanitising chemicals are discharged).

### CAN THE BACTERIA MAKE ME SICK?

**Drain Clear** is very safe. Studies have been conducted to make certain that the ingredients are not hazardous to people or pets. This testing includes studies on inhalation, ingestion and skin contact. Common antibiotics kill all of the bacteria within the product.

### HOW DOES DRAIN CLEAR REACT WITH MICROBES ALREADY PRESENT IN THE GREASE TRAP?

Our biological **Drain Clear** is used in applications where microbes can survive. Every niche in our environment that can support microbial growth has already established a population of “naturally occurring” strains. We use our **Drain Clear** bio-product in these niches when we want to change the conditions (i.e. reduce grease).

As bio-products are seeded into the environment, they must grow and establish a place in that population. They work with the naturally occurring strains often breaking down large, more complex molecules into smaller units that actually feed many of the native strains.

### DOES THE GREASE TRAP TREATMENT CAUSE THE GREASE TO BE TRANSFERRED DOWNSTREAM?

Transference of grease downstream would defeat the purpose of the grease trap, allowing grease accumulation in the receiving collections systems. Numerous municipalities have raised this concern. We have tested this potential in laboratory microcosms to verify that when grease traps are treated as recommended, we can safely conclude that no net transfer of grease from the grease trap occurs.

### WHAT MAINTENANCE WILL I CONTINUE TO HAVE TO DO?

Although the frequency of emptying the grease trap will be greatly reduced, the trap will still need to be emptied, particularly if the water flowing through the trap contains non organic material which is not biodegradable or large food particles, which take a long time for the micro-organisms to digest.

### HOW CAN I TELL IF IT IS WORKING?

There will be a noticeable difference after 4-6 weeks from commencement of the treatment. There will be a reduction in odours from the grease trap. In addition to this, the grease accumulating in the trap will be different in appearance. Instead of it forming a thick solid crust, the grease in the trap will remain liquid looking.



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