

FILL – ONE ENVIROLITE PAINT DISPOSAL SYSTEM





GENERAL INFORMATION

Fill-One is committed to environmental protection and out of this concern the company has developed the “**Enviolite Paint Disposal System**” to ensure that waste paint chemicals and residues from application systems are managed and disposed of in a safe, responsible and appropriate manner. This is essentially a mobile wastewater treatment system which effectively treats and contains wastewater from the washing of used brushes, rollers, containers and any other application system components.

THE SYSTEM HAS THE FOLLOWING ADVANTAGES:

It is the main component of the site environmental management plan (EMP) for the painting operation. It prevents contamination of the:

- Storm water system by preventing spillage onto the ground surface since stormwater enters the Environment Untreated
- Groundwater since spillage onto un-surfaced ground causes seepage of pollutants into the water-table where it is dispersed throughout, negatively impacting the groundwater quality
- Wastewater discharged to the wastewater (sewage) treatment works. Since the unit separates water from sludge it reduced the solids waste discharged into the sewers preventing blockages in the sewers and reduces the sludge burden at the wastewater treatment works. Since much of the COD (Chemical Oxygen Demand) load is contained in the sludge it would also reduce this burden at the treatment works. The sludge is separated and de-watered in the unit and can safely be disposed at a general landfill since there are no residual hazardous materials present.

The unit is a definite advantage to the treatment of this type of wastewater by lending structure to what is still largely a haphazard operation which negatively impacts the environment. It ensures a safe and responsible disposal solution for waste and wastewater from these operations and complies with the provisions of the National Environmental Management Act (National Waste Management Act) and the National Water Act.

BASIC OPERATIONAL PROCEDURE

The system consists of a wash basin with spray guns which needs to be attached to a water point. The paint/water mix from the basin flows into a catchment tank. Once the tank is full a proprietary combination of chemicals are blended with the mixture in the catchment tank. This leads to the flocculation and finally settlement of the solids portion of the paint. Thus, you are left with a liquid layer which is tapped off via a filtering process free of hazardous ingredients (as listed in Schedule 2 of the Municipal Waste Water By-law) and either reused (in the wash system) or released into the sewer system compliant with all Municipal regulations. The sludge portion is pumped into filter bags and allowed to dry. This dried cake can then be disposed of as non-hazardous general waste. The system requires no power source as both the pump and mixing are manual operations.

Furthermore, we also offer the service of recycling the used metal and plastic containers used on site. This we do as follows:

We will establish collection points in each centre for both metal and plastic containers. We only use service providers who can provide proof of recycling.

Metal containers:

We have a national service provider. Each collection point must contact the office in their region & collect their special bags. Once these bags are filled, the service provider will collect from the premises identified. They require the tins to be as clean as possible.

Contractors on site should take care not to stack the drums in each other before the paint residue is completely dry. The Recycled metals are generally used in manufacture of beverage, oil & food cans.

Plastic containers:

A similar strategy is in place however we have regional service providers. Again all recyclers ask that containers are as clean as possible & allowed to dry before stacked.

Some of the recycled plastic material is used in the manufacture of garden furniture, plastic pallets, buckets etc.

PAINT DISPOSAL MACHINES

We strongly recommend that the **Fill-One Envirowash Paint Disposal System** be used on site for the cleansing of tools used in conjunction with all waterbased paints, as no paint should be washed down the stormwater drains.

DOMESTIC MACHINE



For use at homes and smaller offices

INDUSTRIAL MACHINE



For use at larger sites and buildings



PAINT DISPOSAL SYSTEM OPERATION:

BASIC WASHING PROCEDURE

1. Place plug into the machine's basin.
2. Wash brushes, rollers etc with water in the basin.
3. Wash and rinse out basin to ensure it stays clean and unclogged.

MAIN SYSTEM CLEANSE

Once the tank has reached the max level, which is just below the inlet from the top basin, the following cleansing procedure is to be taken:

1. Add (1Lt Domestic/ 2Lt Industrial) of Floc 1 into the main tank, and stir vigorously for five minutes with a plunger.
2. After mixture has been thoroughly stirred, add (½ Lt Domestic/1Lt Industrial) of Floc 2 and stir again for a further three minutes.
3. The material is then to be left at least overnight, or for 24 hours to allow optimum result.
4. Open tap, which is located on the water filter, and allow water to run into the sewer.
5. The sludge which is left over, after all the water has drained, is to be pumped into the filter bag/s.
6. Once all sludge has been pumped and the tank is completely empty, the filter bags are to be emptied into the empty buckets provided.
7. A Fill One representative will remove buckets from site.

NOTE: This machine is strictly for water based products only and is not to be used as a refuse bin for food waste or any other waste material as this will result in machine clogging and costly damage.

ENVIROLITE FACTS

Midas Earthcote has undertaken to reduce the effect that our coatings have on both indoor and outdoor air quality. We have done this by reducing the VOC (Volatile Organic Compounds) content of our paint – now available to consumers as ENVIROLITE.

WHAT ARE VOLATILE ORGANIC COMPOUNDS?

VOCs are those compounds that give off that fresh paint smell. The odour is caused by VOCs off-gassing into the air, which can be irritating to the eyes, nose and throat and possibly harmful in other ways. VOCs contribute to poor air quality. ENVIROLITE helps you to choose paint with less – or Zero – VOCs. ENVIROLITE is leading the paint industry in reducing VOC – and because Midas has sourced better raw materials at better prices, ENVIROLITE Zero VOC topcoats don't cost any more than conventional paint. Midas Paints adopts the EU standard which defines a Volatile Organic Compound as any carbon-based substance with a boiling point of 250° C.

ANY COLOUR CAN BE ZERO VOC

Most manufacturers only stipulate the VOC content of their white paint.

Adding colourants often substantially increases the VOC content of paint because most conventional colourants contain Glycol, which is considered to be 100% VOC. For this reason it should always be ascertained whether the VOC stated is for white or colour-tinted products. Within the Freeworld group we have access to colourants that are not only Glycol, APEO, Formaldehyde and Lead FREE but are also certified Zero VOC and therefore do not add to the VOC content of a tin of paint, once it has been tinted.

WHAT'S IN A TIN OF ENVIROLITE?

Every coating in the ENVIROLITE range is rated according to its VOC (Volatile Organic Compounds) content, based both on international standards and our own stringent standards. All Envirolite top-coats are Zero VOC.

GOOD, BETTER, BEST: HOW DO ENVIROLITE PAINTS STACK UP?

Every tin of Envirolite is clearly marked, indicating its VOC Content *VOC's theoretically determined

ZERO VOC	MIN VOC	LOW VOC	MED VOC
 <i>Less than 1 gram of VOCs (per litre)</i>	 <i>More than 1 gram but less than 3 grams of VOCs (per litre)</i>	 <i>More than 3 grams but less than 30 grams of VOCs (per litre)</i>	 <i>More than 30 grams but less than 80 grams of VOCs (per litre)</i>
NO GLYCOL, APEO OR FORMALDEHYDE • 190,200& 225 (MATT) • 230 (SATIN) • 240 (LOW SHEEN) • WATER-BASED SATIN GLOSS ENAMEL	NO GLYCOL, APEO OR FORMALDEHYDE • METAL PRIMER • WOOD PRIMER	NO GLYCOL, APEO OR FORMALDEHYDE • WATER-BASED MASONRY PRIMER	• FRESCO

Besides having reduced or Zero VOCs, many of the Envirolite products have also been reformulated without these potentially hazardous chemical ingredients that are conventionally used as drying time retarders, preservatives and stabilisers.

NO LEAD

Lead is a thing of the past – there is no lead in any Midas paint products.

A 'GREEN STAR' PRODUCT

The green building council of SA states that for internal walls to qualify for a "Green Star" rating, coatings should have 16 grams VOC per litre or less. (For ceilings its 14g per litre.) The EU directive for 2010 puts this figure at 30g VOC per litre. In South Africa, were already way ahead of international standards. Midas ENVIROLITE Hs taken things a step further, achieving Zero VOC with certain water-based top-coats. (By Zero VOC, we mean less than 1 gram of VOCs per litre. In other words, virtually negligible VOCs.) ENVIROLITE is able to maintain its low VOC content by making use of Glycol-free colourants, which helps to significantly reduce possible health hazards of paint.

