



MGK Electromechanical Works LLC

Ambion Fact Sheet

What is it?

This unit is a powerful ioniser which is designed to operate in commercial and industrial applications where there is sufficient air exchange and odours to react with the small amount of ozone which is released from the unit.

How does it work?

The mode of action of the Ambion unit is to (1) ionise or charge airborne particles which will cause them to drop out of the air, and (2) produce ozone which is released into the ambient air attacking odours and killing microbes.

Who designed it?

The Ambion is a product of Plasma Clean and utilises advanced air cleaning technology developed by the University of Manchester, UK. Unlike most products in the marketplace which simply mask the problem, Ambion acts by effectively reducing odours and destroying microbes in the air, helping to dramatically improve air quality, leaving your environment smelling fresh and clean.

What is the maximum ozone level it produces?

The units can produce up to a maximum of 0.1 ppm noting that this is in the absence of volatile compounds with which it breaks down.

Does it run continuously?

The Ambion is designed to operate on a timed basis so that the unit is never running constantly but rather set to the room conditions. This is achieved by setting the correct periods during which it alternately runs and is inactive, using the controls provided.

Is it safe?

The Ambion is designed with the safety of individuals in mind. The output is based on regulations that exist to limit the exposure of people to ozone to safe levels. In Australia the exposure limit values are 0.2mg/m³ peak or 0.1ppm Time Weighted Average (in accordance with Safe Work AU). It should be noted that the units are designed to combat odours by the chemical reaction between them and the ozone so in fact the ozone is also depleted in that reaction. Under normal operating conditions, then, the exposure limits will not be reached.



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Where can I use it?

It can be used in most situations where there is an odour nuisance. **Typical examples are refuse collection areas, washrooms and the like.** Each case is different, though, as the amount of volatile organic compounds present, the numbers of fresh air changes and other factors have an impact on the settings for the unit. Modelling is completed to ensure the unit is both safe and effective. The minimum sized room that the Ambion should be installed in is 9m³

Can I change the settings?

This is not recommended for most users. It should be done by a qualified person.

Can I move it around?

This should not be done without first re-examining the room conditions and checking the modelling.

Do I need more than one?

This may be the case for very large areas, where there are very frequent air changes or a particularly large amount of VOC's present.

I read somewhere that ozone is harmful

This is true in large quantities. However when the Ambion is used correctly these limits won't be exceeded as described above.

Is this one of those air purifiers I have read about?

The Ambion is not an air purifier but an odour control device and not meant for use in domestic situations. Many of the units sold in the past for domestic use lacked the sophisticated controls that are present in the Ambion.

Does it also kill germs?

The Ambion has been proven through laboratory testing (by the University of Leeds, UK) to be capable of significantly reducing the concentration of airborne *Staphylococcus aureus*, a major cause of hospital infections. When the Ambion ioniser device was in operation the concentration of airborne *S. aureus* dropped from an average of 48,943 cfu/m³ to 138 cfu/m³ which represents a kill of 99.7%.