AIR FRESHENERS (AIR IONIZERS)

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What are air ionizers?

- Purifies the air in a room by electrically charging air molecules.

- Uses ion to get rid of particulates, microbes, and odors from the air that is around you.

- Makes the air you breathe more healthier (especially for people with asthma or breathing issues).

- Used on tabletops, inside machines, and guns that are handheld.

How are air ionizers an application of static electricity?

- They are used to clean the air of static charge.

- Air ionisers work by flooding positive and negative ions into the atmosphere. These ions on a charged substrate are attracted to ions of the opposite polarity. As a consequence, it neutralises the static electricity that has accumulated on goods, equipment and surfaces.
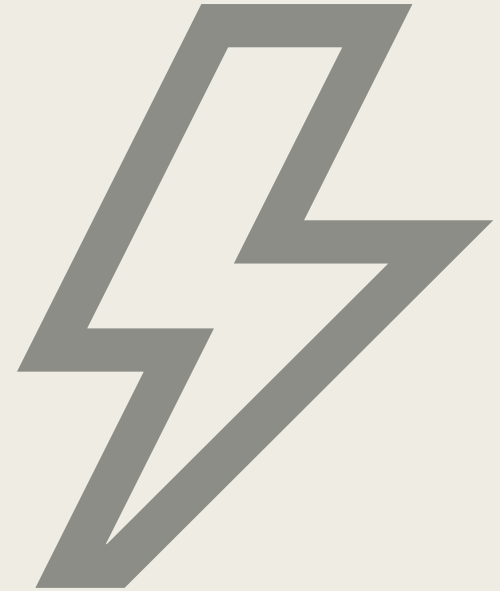
How is static charge created?

- Triboelectric charging is the most common method of charging. There may be an exchange of charges between the surfaces of the two materials if materials are brought into close contact. The magnitude of this exchange of charges may depend on a number of variables, but when the substances are separated, the result is two objects charged to the contrary.

- The second common method of static charge generation is known as inductive charging. This happens when a charge on an isolated conductive object is "induced" that is brought into the field created by the charge on another object.

How do air ionizers work?

- With electricity, the air ionizers create negative ions, which then go into the air

- The negative ions in the air will latch itself to positive ions in the air (since they attracted to each other), The positive ions in the air is also the filth

Ex. Smoke, pollen dust, bacteria, etc.

- When the positive and negative ions bond it will create particles, so then the dirt particles fall on surfaces waiting be cleaned up

Sources

- https://www.airoasis.com/knowledgebase/air-ionizer-benefits/

- https://breathequality.com/ionizer/

- https://technology-ionization.simco-ion.com/resources/faqs