



Everything You Ever Wanted to Know About Duster

...but Were Afraid to Ask

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Duster, also called “canned air”, “compressed air”, and “dusting gas”, is one of those product categories that seems so simple, which leads to many misconceptions. Aerosol duster is used to provide a pressurized blast, knocking loose dust and dirt. Think of it as a portable replacement for an air compressor line. This can be used to blow out cookie crumbs from a computer keyboard, clear out computer fan vents, and even open up tight apertures in a surface mount stencil.

The following are answers to common questions and misconceptions about duster:

Duster is not “canned air”.

Most aerosol duster contains a refrigerant/propellant that can in no way be considered “air”. As a matter of fact, breathing too much of the vapors can lead to negative health consequences. Duster is most commonly filled with the following propellants:

- **HFC-134a** – Most common for industrial applications because it is non-flammable. On the back label, look for “1,1,1,2-Tetrafluoroethane” or CAS #811-97-2.
- **HFC-152a** – Most commonly available duster in consumer retail because it is less expensive than HFC-134a. It is flammable, and will ignite when concentrated (i.e. in liquid form) and exposed to a spark or flame. On the back label, look for “1,1-difluoroethane” or CAS #75-37-6.
- **CO₂** – Not as common because the spray force is not consistent. Because of the higher pressure, it comes in small, low capacity cartridges.

Industrial duster is not the same as retail duster.

Customers looking for the lowest price often look to consumer retailers. Consumer duster is designed to be as cheap as possible, sometimes imported from outside the US, but can lead to some definite problems for industrial users:

- **Retail duster generally HFC-152a** – Look on the back of a can of aerosol hair spray, and you’ll generally find propane (the same propane as in your gas grill) or butane (the same butane in a Bic lighter). These are used because they are cheap, not because they are safe. In the industrial markets, safety is a top concern, with careful oversight by OSHA. Because of this, HFC-134a is more widely accepted in industrial markets, even at a higher price.
- **Purity can be questionable** – Industrial buyers rely on trusted industrial brands, like Techspray, because quality is closely controlled. Material is highly filtered and controls are in place to avoid moisture and other contamination.
- **Additives to prevent huffing** – Many retail dusters have bitterant added to prevent huffing. When duster is used in the home, there is concern that the material will be purposely inhaled (called “huffing” or “dusting”) by minors, which can sometimes lead to tragic consequences. To avoid this, bitterant is added to make the duster taste bad. This same bitterant can lead to unwanted and potentially harmful residues on sensitive surfaces like circuit boards.
- **Check fill weight** – Retail duster can come in a variety of fill weights (the content of the material in a can) including 3.5 oz., 8 oz., and 10 oz. This can only be judged by the label, since the size of the spray can may not vary.

Dusters do not hurt the ozone layer.

There is a misconception based on old information that dusters hurt the ozone layer. Dusters contained CFC’s over 15-years ago, but have since been replaced with materials that do not impact the ozone layer.

Duster can impact global warming.

The two most popular duster types, HFC-134a and HFC-152a, have been shown to add to global warming. This is referred to as the material’s Global Warming Potential (GWP), and is stated relative to CO₂. HFC-134a is the higher of the two, with GWP of 1300 (1,300 times the GWP of CO₂). HFC-152a has a lower GWP at 130, about 10% of HFC-134a.

As the above details demonstrate, care needs to be taken even when choosing an everyday consumable like duster. Call Techspray or your distributor for help deciding which duster is right for your application.

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Techspray is a formulator and manufacturer of precision cleaners for industrial and electronic applications. More information of Techspray's alternative cleaners, such as G3, can be found at www.techspray.com.