

Bio Ethanol Fireplaces

Are Bio-Ethanol Fireplaces safe?

Bio ethanol fireplaces are trendy right now, they offer some advantages as compared to electricity or to wood fireplaces and yesterday I outlined the advantages of ethanol fireplaces. Today I thought it might help some of you to know the dangers that exist.

What is new is often controversial and the use of ethanol has not been the exception, sorting out what is true is not always easy for homeowners. Internet Home Alliance consults with experts to bring you the most accurate information. The information on this page is valid whether you have a free standing ethanol fireplace, a wall mount fireplace, or an ethanol fireplace insert.

Are these ventless fireplaces really dangerous to use? Let's first talk a little about physics, when ethanol burns two by-products are emitted: carbon dioxide and water. However, if there is not enough air circulation, or space, in the room where the fireplace is located, it can result in an incomplete combustion of ethanol. When any combustible does not burn completely carbon monoxide is discharged in the atmosphere with water and black carbon particles. Carbon monoxide is a dangerous gas, it is a colorless and odorless gas that is very toxic to both humans and pets. It combines with hemoglobin in blood and affects our lungs.

Should your ethanol fireplace not work properly then several dangers would be present: a decrease in oxygen in the room as the levels of CO₂ intensify, increased humidity in the room, and production of carbon monoxide along with carbon particles.

Is it then irresponsible to buy an ethanol fireplace knowing the dangers that are present?

I cannot answer this question as you alone can decide.

However I can tell you that all the research and all the reliable

manufacturers of ethanol fireplaces are in agreement about the safety of their product when used as intended. They do recommend that, as you would when handling any flammable products, some precautions be taken.

It is highly recommended that you install the fireplace in a well ventilated area. Any room smaller than 100 square feet or without windows should not be considered. You should also keep your fireplace and burner in good working condition, and follow manufacturers maintenance guide-lines.

When using the fireplace it is important to be careful, because ethanol is a highly flammable liquid. When refueling you should take precautions not to drop any on the floor or nearby furniture. The fireplace should be cold before refueling to avoid risks.

Storing ethanol should be confined to safe areas away from heat sources, and in smaller containers (avoid containers larger than 2 quarts or 2 liters.) Keep ethanol away from children.

Lastly you should remember that ethanol fireplaces are not intended to be a primary source of heat in the house, and are conceived to be used occasionally. You should not leave it on all day, and you should turn it off when you leave the room for an extended period of time.

I have not found any restrictions for use in the United States, in Europe new regulations are in the making that would require homeowners to install carbon monoxide detectors when installing an ethanol fireplace. This however is not yet in effect. More to come as we get the information, subscribe to our RSS to be sure to get informed when we know more.

SOURCE: Internethomealliance.org