

Plastic Bucket Filter

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Good luck,

Jeff



Abstract: A Producer Gas filter made from a recycled plastic bucket.

Links:

[Email](#)

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[Bioenergy](#)



Photo 1

I thought I would try using polyester batten as a packed bed filter media. Feel free to use your favorite material.



Photo 2





Photo 3



Photo 4



Photo 5



Photo 6

At first a Uniseal slip fitting (Photo 4) was used to couple the pipe to the bucket which can be seen in photos 3,4,6, 8, 9, 10, 15, 21 and 22. They work very well and cost about \$5.50ea. but this is a good example of where a fool and his money soon part, in this case. Later you will see how to make the bucket into a slip seal.



Photo 7



Photo 8



Photo 9



Photo 10



Photo 11



Photo 12

WARNING: KEEP AWAY FROM FLAME.
ORIGINAL BUFFALO SNOW MELTS AT
TEMPERATURES ABOVE 450 °F (232 °C).

Photo 13

Original Buffalo Snow® is carefully
crafted of 100% polyester and is flame
retardant.

Original Buffalo Snow is perfect for all
kinds of Christmas decorations, only limited
by your imagination.

Photo 14



Photo 15



Photo 16



Photo 17



Photo 18



Photo 19



Photo 20



Photo 21



Photo 22

The lid end becomes the bottom of the filter.

As of 2014 the Uniseals are no longer used because of cost. The below method uses heat to form the bucket to the shape of the inlet/outlet pipe after drilling an undersized hole. Don't make the hole too small, in relation to the pipe, or else the plastic wall of the bucket could split. If a split does form apply some silicone RTV to the crack.



The bucket it self can become the slip fitting.

- Drill a hole in bucket
- Chamfer the end of the pipe or make a rounded plug insert for the pipe.
- Heat bucket wall.
- Use a hollow backing block, in this case a jar.
- Press chamfered end of pipe into heated bucket wall.



