Enzyme Cleaner

Ingredients

- 1/2 cup (100 g) brown or white sugar
- 1 teaspoon (3 g) yeast
- 4 1/4 cups (1 L) lukewarm water
- 2 cups (300 g) fresh citrus peel

Wash and chop the citrus peel. Rinse the citrus peel under running water and scrub the outside with a vegetable brush to remove dirt and impurities. Pat the peels dry with a clean towel, and carefully chop the peels into half-inch (1.3-cm) cubes. The pieces have to be small enough to fit into the opening of a pop bottle.

- You can use a variety or mixture of citrus peels to make your homemade enzyme cleaner, including l emon, lime, grapefruit, and orange.
- It's important to use fresh citrus peels that aren't dried out or rotting. Dried peels won't contain enough citrus oil for cleaning, and rotten oneswill cause the mixture to mold.

Combine the ingredients. Insert a wide-mouthed funnel into the mouth of a clean 2-liter (67.6-ounce) pop bottle. Pour the citrus peel chunks in a handful at a time until they've all been added to the bottle. Add the sugar, yeast, and water. Remove the funnel and screw the cap on tightly. Shake the bottle vigorously for a few minutes, until all the sugar is dissolved.

- Its important to use a pop bottle for this recipe, because they';re designed to hold liquids that are under pressure.

Vent the gas multiple times a day. After the sugar has dissolved, unscrew the cap to vent any pressure that's built up inside the bottle. Screw the cap back on. Repeat this process at least three times a day for two weeks to prevent the bottle from exploding.

- After two weeks, reduce the venting to once a day, as most of the sugar will have been converted, so less carbon dioxide will be produced. [2]
- As the yeast eats the sugar in the mixture, it will convert the sugar to alcohol and carbon dioxide. This gas will build up in the bottle when the lid is on.
- It's important to leave the cap on and tight during this process, because the yeast needs an oxygen-free environment to ferment properly. Oxygen will also allow bacteria and mold to grow in the mixture.

Place the bottle somewhere warm to ferment. The optimum temperature for yeast fermentation is 95 F (35 C), so you have to keep the mixture somewhere warm while it ferments. [3] A good place for the mixture is on top of a refrigerator.

- The yeast will take about two weeks to ferment, but you can leave the cleaning mixture for up to three months for a stronger solution.

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Shake daily while the mixture ferments. Over time, the solids in the mixture will sink to the bottom. Every day, vent the gasses, screw the lid back on, and shake the mixture gently to stir up the contents. Vent the gas again before screwing the lid back on.

- Continue swirling daily until you decide that the mixture is ready.

Store in an airtight container. Transfer the strained cleaning liquid to an airtight container for storage. Exposing the mixture to oxygen will cause it to lose its potency, and it won't clean as effectively. [4]

- To make ready-to-use cleaner, store small amounts of the cleaner in a spray bottle and keep the rest in an airtight container.

Mix a diluted cleaner for delicate jobs. In a spray bottle or other container, mix one part enzyme cleaner with 20 parts water. Shake or stir to combine. This mixture can be used to wash cars, wash floors, and for other jobs around the house that don't require a super-powered cleaner.

Make an all-purpose cleaner. Measure 1/2 cup (118 ml) of enzyme cleaner and transfer it to a clean spray bottle. Mix in 4 1/4 cups (1 L) of water. Screw on the spray nozzle and shake the mixture to combine the water and cleaner. Shake before each use.

- This all-purpose cleaner can be used on all surfaces to clean bathrooms, carpets, kitchens, for minor stains, and other cleaning needs.

Mix with vinegar for an even stronger cleaner. For a stronger all-purpose cleaner, mix one part apple cider vinegar with four parts homemade enzyme cleaner. Transfer the mixture to a spray bottle and use to clean kitchens, bathrooms, and tough stains.

Use the cleaner undiluted for tough jobs. For tough stains, caked on grime, odors, and built-up dirt, apply the homemade enzyme cleaner directly to the affected surface. Let the cleaner sit for a couple minutes, and then wipe the area with a damp sponge or cloth.

- Enzyme cleaners are great for cutting grease, and this cleaner can be used undiluted around the kitchen and the garage.
- You can also try this method for removing scale and lime buildup on things like dishwashers, kettles, shower heads, and other appliances and fixtures.

Wash laundry with it. You can use the enzyme cleaner as a replacement for laundry soap or as a booster that you add to your regular detergent. Add 1/4 cup (59 ml) of enzyme cleaner to your washing machine drum or detergent compartment. Set and run your washing machine as normal.