MILLIARD CITRIC ACID USER GUIDE 25+USES



About Milliard™ Citric Acid

An organic acid made from sugar cane, Milliard™ Citric Acid is a non-toxic and versatile household staple.

Directions

Store in cool dry place.

Our Citric Acid Is

- FCC
- Food Grade
- USP
- Non-GMO

- Gluten-Free
- Biodegradable
- Vegan
- FDA GRAS



Cleaning

SURFACES

 $2^{1/2}$ TEASPOONS

citric acid

1 CUP

warm water

Mix well and apply.

CARPET /TILE /STAIN REMOVAL

3 TABLESPOONS

citric acid

2 CUPS

hot (not scalding) water

Dissolve citric acid in water. Dip a towel in the solution and rub the soiled surface. Rinse with water.

WARNING: Do not use on marble, brass or varnished metals. Do not mix with chlorine bleach or other cleaning products as irritating fumes may be formed.

Rust Removal

5 TABLESPOONS citric acid

4 CUPS

water

Mix the solution and apply. Let it soak for 5 minutes. If needed, scrub and soak more. Rinse.

Burnt Pans

6 TABLESPOONS citric acid

4 CUPS

water

Mix citric acid with water in the pan. Boil for 5 minutes. Rinse the pan once cooled.

Limescale Buildup

11/2 TEASPOONS citric acid

1 CUP water Tap water often contains dissolved minerals, including calcium carbonate, which cause scale buildup. Citric acid captures the minerals in the hard water which balances the pH, helping to eliminate the scale. Mix citric acid and water well and apply. Let it sit for a few minutes before wiping or rinsing.

Coffee Pot/Urn/Kettle

1 TABLESPOON citric acid

2 CUPS water

Boil and let it sit for a few hours. Rinse with lots of water.

Coffee Machine

2 TABLESPOONS citric acid

4 CUPS hot (not scalding) water Pour the mixture into the water reservoir of the machine and brew. Allow the mixture to sit for a few hours, then brew again. Next, fill with plain water and brew to rinse the machine.

Dishwasher

DISHWASHER CLEANING

Empty the dishwasher. Add 3 tablespoons of citric acid to the reservoir. Close the cover and run a normal cycle. With the machine still empty, run another normal cycle with regular dishwasher detergent. Heavily soiled dishwashers may require a repeat cycle.

ROUTINE MAINTENANCE

To remove water spots from dishes and make glasses sparkle add a tablespoon of citric acid to a dishwasher load. Load the dishes and detergent as usual.

Fruit and Veggie Wash

SOAK

1 TABLESPOON citric acid

4 CUPS cold water

Rinse the produce with cold water. Mix citric acid and water. Soak produce in the mixture for 5–10 minutes (tender berries soak only right before serving for just 1 minute). Rinse with cold water.

SPRAY

11/2 TABLESPOONS citric acid

4 CUPS water

To remove dirt and grime: Rinse the produce with cold water. Mix citric acid with water in a spray bottle. Spray the produce with the mixture and let it sit for 1 minute. Rinse with cold water.

Lemon Juice Substitute

¼ teaspoon of citric acid can generally be used in place of 1 tablespoon of bottled lemon juice. Note that citric acid has a less lemony flavor.

Sourdough

Add about ¼ teaspoon of citric acid per loaf for a tangier sourdough, tweaking the amount of citric acid to adjust the flavor.

Canned Tomatoes

Enhance a canned tomato recipe by adding ½ teaspoon of citric acid per quart of tomatoes. For recipes with lemon juice, reduce the lemon juice by 2 tablespoons.

Stiff Egg Whites

When beating egg whites, add a sprinkle of citric acid to help them stiffen.

Candy

- For most candy recipes, use ⅓ teaspoon citric acid per 2 cups of sugar. Add more citric acid for a tangier flavor.
- For super sour recipes, add 1 teaspoon citric acid per 2 cups of sugar.
- For hard or cooked candies, add citric acid only once the syrup has cooled below 265° F to prevent burning.
- To make a sweet & sour coating, combine 1 teaspoon of citric acid with 1 cup granulated sugar and mix well.
- Add a pinch (1/16 teaspoon) of citric acid to gummies to provide a touch of acidity.

Marninade

Marinades are typically a combination of an acid, oil and flavoring which transform the taste and texture of food. Generally, for a marinade with 3 tablespoons of oil, use 1 tablespoon of water mixed with a 1/4 tablespoon of citric acid, along with other flavoring. Keep in mind that dense foods like beef and mutton require marinating for longer in a more acidic marinade, while tender foods like chicken, fish and tofu would marinate in a less acidic recipe for a shorter amount of time.

Game Meat

5 TABLESPOONS citric acid

1 QUART water

In order to help preserve the quality of game meat, apply the mixture immediately once the meat is exposed to the outside environment. Spray until the mixture runs off the meat. Using a pH test strip, test the pH by swabbing many areas of the meat. Be sure to keep the pH under 5, best between 2 and 4.

Animal Feed

11/2 TABLESPOONS citric acid

2 QUARTS drinking water

Add citric acid to water to improve the performance and mineralization of the bones, the digestive system and the absorption of nutrients in broilers, piglets, ruminants and calves.

2 CUPS baking soda

11/4 CUPS citric acid

1/4 CUP corn starch or other starch powder (for buoyancy)

A FEW DROPS scents and/or coloring

NOTE:

The humidity of the working area will affect the dryness or wetness of the final mixture. By trial and error, increase baking soda if the mixture is too wet and decrease baking soda if the mixture is too dry.

- 1. Whisk the powdered ingredients in a bowl until thoroughly combined.
- 2. In a separate bowl, add oils, scents, coloring, and about ½ ounce of water. Mix to spread the coloring evenly.
- 3. While whisking, slowly drizzle the wet ingredients into the powder mix until the mixture is evenly distributed without clumps.
- 4. Use a spray bottle filled with water to mist the bowl and keep the mixture just moist enough to stick together in the mold. Spray 2-3 times every few minutes and continue whisking to prevent the ingredients from activating. If the mixture starts to foam, the mixture is too wet.
- 5. Scoop the mixture into the bomb molds and pack tightly.

Balance pH

Adding citric acid to water will increase acidity, meaning, lower the water's pH from its natural pH of 7.

HOW TO CHANGE THE PH OF 1 LITER OF WATER:

DESIRED PH	AMOUNT OF CITRIC ACID TO ADD
: 6	.14 grams
5	.33 grams
4	.71 grams
3	2 grams
2	44.2 grams
1	563.25 grams

Mold Free

Citric acid is made from fermenting sugar cane using a selected strain of Aspergillus niger mold. After fermentation, the citric acid is filtered and then purified to ensure that the final product does not have any remaining microorganism. Monthly tests are conducted to ensure that there are no remaining mold strains.

Disclaimer

The recipes above were developed specifically for Milliard™ Citric Acid. We are not a professional lab and the effectiveness of the suggested recipes is based off our own research and testing. Results may vary.

Warning

Citric acid can be harmful if swallowed in large amounts. It may also cause skin irritation and allergic skin reactions, eye irritation, or potentially serious eye damage, nose and throat irritation. Breathing in citric acid dust can cause nose and throat irritation. Accordingly, please follow the following safety instructions for using Milliard™ Citric Acid:

- Please review the warnings on the product package and follow use instructions carefully.
- Do not exceed the amounts of Milliard[™] Citric Acid recommended in this manual or on the product package.
- Always protect your skin and eyes when working with Milliard™ Citric Acid, particularly if you have sensitive skin.
- Only use in a well-ventilated area.
- Consult a medical practitioner before using citric acid for any therapeutic purposes or if you have a medical condition.
- Always store Milliard™ Citric Acid away from children.

