

# **Citric Acid**

Product information article no. 950

Naturfarben GmbH

#### General

Citric acid is one of the most widespread plant acids, and occurs as a metabolic product in all organisms. In the human body, approx. 2g citric acid is formed daily as an intermediate product and reacted again. In the past, citric acid was obtained from lemon juice by reaction with ammonia and sulfuric acid. Today, it is mainly obtained by fermentation (using certain fungi) of sugar solution. They can be used in a wide variety of ways: added to baking powder and cosmetic/pharma products, flavouring in beverages and food. The coffee machine decalcifier, which is usually sold in small packs at high prices, is nothing other than citric acid.

Citric acid is a versatile, especially used as a universal lime remover, inexpensive and non-toxic household remedy, which should not be missing in any household.

Anyone who produces children's modelling clay himself will no longer want to do without citric acid as a non-toxic and softening additive. The recipe is further down the page!

# Properties

- cleansing action
- decalcifying
- neutralizes alkaline solutions
- environment-friendly and non-toxic
- inexpensive and productive
- vegan

# ■ Composition (Full Declaration)

100 % Citric acid (crystalline)

#### Trial Applications

To avoid irreversible stains and to test the compatibility of the surfaces to be treated with citric acid, test applications must be carried out on a concealed area prior to large-area processing.

# Application

# - Decalcifying coffee machines

Dissolve 1 - 2 tablespoons of citric acid in 1 litre of cold water and pour into the machine. Run through approx. 1 cup, switch off the machine and leave to stand for 15-30 minutes. Allow the rest to run through and rinse twice with clear water.

# - Descaling of kettles

Dissolve 1 - 2 tablespoons of citric acid in 1 litre of water and fill into the machine. Bring to the boil for a short time and leave to act for 30 minutes. Rinse thoroughly with water. - Descaling the washing machine

Add 6-8 tablespoons of citric acid to the drum and run a 95° program (of course without clothes).

- Removal of burnt food from stainless steel pots and pans

Dissolve 2 tablespoons of citric acid in 1 cup of water and boil in the pot or pan for a few minutes. Rinse thoroughly.

- Descaling of shower heads, perlators, fittings Dissolve 2-5 tablespoons of citric acid in 1 litre of warm water. Place parts in this solution and allow to act for a longer period of time, or use it to wipe parts. Rinse thoroughly.
- Removal of stains from cups, pots, toothbrush cups, flower vases

Add 1/2-2 tablespoons of citric acid to each vessel, pour over with hot water and leave to act for 30 minutes or longer. Rinse thoroughly.

- Cleaning of chrome, stainless steel, ceramic and plastic surfaces

Dissolve 2-5 tablespoons of citric acid in 1 litre of warm water. Wipe the surfaces and rinse them thoroughly.

- **Removal of lime, cement and gypsum stains** Dissolve 3-6 tablespoons of citric acid in 1 litre of water and wipe surfaces with it. Rinse thoroughly.

# - Making children's soft clay:

Using citric acid in children's modelling clay is a small miracle ingredient. In combination with table salt, this results in a mixture that is "hygroscopic", i.e. keeps the moisture for a long time. This is particularly important for children's modelling clay, as it should remain supple for a long time.

The rapid drying and "crumbling" known from simple dough is thus considerably delayed. Test the difference! This phenomenon has long been known in the butcher's trade, where a similar mixture is added to sausages to prevent them from running apart due to their high water content; here water is made cuttable, so to speak. Packaged in airtight freezer bags and stored in a cool place (e.g. refrigerator), the modelling clay has a shelf life of many weeks.



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#### Recipe for children's soft clay

Put 500g wheat flour (e.g. type 405) 150g table salt, 3 tablespoons citric acid 20-50g colorful Kreidezeit Earth Pigments (e.g. red and yellow ochre, burnt umber, etc.) in a bowl and mix well.

Bring <sup>1</sup>/<sub>2</sub> litres of water to boil, add 5-8 tablespoons of cooking oil and stir into the flour/salt/lemon acid mixture. Then knead thoroughly. Ready! All this takes about a quarter of an hour, is fun and costs almost nothing.

#### Package Sizes

Article no. 950 1 kg For prices please refer to the valid price list.

#### Storage

If stored dry and possibly under airtight conditions, citric acid has an almost unlimited shelf life. High humidity causes lumps, but this has no influence on the properties of the soda.

#### Material incompatibilities

Not suitable for enamel, aluminium, marble, soapstone and all acid-sensitive materials and surfaces. Protect coloured textiles from citric acid splashes (danger of irreversible stains), rinse immediately with plenty of water.

Older coffee machines, washing machines and water heaters are often so calcified that the heating elements and seals are damaged. If descaling of these devices should lead to malfunctions or loss of function, there is no reason for complaint. This is either poor care or old age.

#### Cleaning the Tools

Immediately after use with water. Treat textiles and brushes with household vinegar if necessary (materials must be tested for compatibility with vinegar).

#### Disposal of Residues

Use up product residues, as they have an almost unlimited shelf life. Dry product residues can be disposed of with household waste.

# ■ Warning

Danger of irreversible stains - protect surfaces that must not be treated from product splashes or clean immediately after contamination with plenty of water. Do not bring into contact with alkalis, can lead to severe reactions. Pay attention to possible natural substance allergies. Due to the natural raw materials used, a typical product odour occurs! **Store out of reach of children.** 



#### Warning

#### Hazard Statements

- H319 - Causes serious eye irritation.

#### Precautionary Statements

- P280: Wear protective gloves/protective clothing/eye protection/face protection.
- P264: Wash thoroughly after handling..
- P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do continue rinsing.
- P337+P313: If eye irritation persists get medical advice/ attention.

The information above was determined based on our most recent experiences. Due to processing methods and environmental influences, as well as the varying nature of the substrates, liability for the general validity of the individual recommendations is excluded. Users must test the product prior to application to ensure it is fit for the designated purpose (sample coating).

This document is no longer valid if a new version is published or the product is modified. The latest product information is available at Kreidezeit directly or on the Internet: www.kreidezeit.de.