

Chef Jenn's Molecular and Modern Mac and Cheese

Most cheese when melted are not great choices for cheese sauce and the oils and fats will separate when melted. However,

ANY CHEESE WILL WORK IN THIS APPLICATION- Gruyere, cheddar, brie, Monterey Jacks, Feta, etc...ANY cheese will work and melt when you add Sodium Citrate.

Its SCIENCE!

Sodium Citrate is the sodium salt of citric acid and is derived from Pomegranates and Grapefruits.

It is NOT citric acid, but like citric acid, it has a sour taste. Like other salts, it also has a salty taste. It is commonly known as sour salt and is mainly used as a food additive, usually for flavor or as a preservative. It gives club soda both its sour and salty flavors. It reduces the acidity of foods, so it allows spherification with strongly acidic ingredients. Sodium citrate is also used as an antioxidant in food as well as a sequestrant. It dissolves easily and acts instantaneously.

It also binds with the proteins in dairy and makes it so when it is used with cheeses, the milk and cheese will not curdle or separate. No need for flour or butter (a roux) to make an exceptional cheesy, creamy cheese sauce! Great for nachos too! OR pour the cheese sauce in a small loaf pan and let it harden, then as needed, slice it for the best grilled cheese ever!

Ingredients:

- 1.5 cups milk
- 4 cups FRESHLY shredded Sharp Cheddar and Mild Cheddar Mix (**do not use pre-shredded as it is coated with cellulose and may inhibit the creaminess and melting capability of the cheese)
- 2 teaspoons Sodium Citrate - can be found at Modernist Pantry online – 50gm, about 10 Teaspoons Cost about \$6.00.
<https://www.modernistpantry.com/sodium-citrate.html>
- 1-pound pasta – I prefer traditional elbows

Cook pasta to package instructions.

While pasta is cooking, heat the milk and sodium citrate over medium heat in a medium saucepan until the sodium citrate is dissolved.

Add the shredded cheeses and whisk to incorporate and blend until melted

Pour the finished cheese sauce over the macaroni and serve.

OR

Add the mac and cheese to a buttered baking dish and top with a buttery crumb topping. Bake in a 350-degree oven for 20-25 minutes. Enjoy!

