



CYNZIME®

The natural way to cheese



GROW YOUR CHEESE BUSINESS

Cynzime® is a 100% thistle rennet extraction produced by Enzyme Development Corporation in Scranton, PA, USA. The powder and the liquid versions have standardized activities based on the Milk Clotting Assay. By standardizing, the guess work regarding the potency of the enzyme is removed. The activity is the same from batch to batch. This allows the cheese maker to concentrate on the variables within the milk and not worry about the rennet.



CYNZIME'S® VALUE



Photos credited to: Winding Road Cheese

- Cynzime® is a **standardized** thistle rennet in liquid and powder form.
- The behavior of the rennet is **Controllable** from batch to batch and the product is consistent year round.
- 100% flower extract, **made in the USA**. Does not contain any other milk clotting additives.
- It is **Kosher** (Kof-K) and **Halal** (IFANCA) Certified.
- It is a **true vegetarian rennet** which can help produce unique flavors and textures.
- It is **Non-GMO**, it meets USDA organic requirements and is approved for use by the FDA.

Cynzime® has a unique milk clotting property that is different from the typical rennet from animal or microbial sources. The suggested recipe below is specific to Cynzime®, and its inherent differences in clotting time and temperature.

Basic Pressed Washed – Curd Cheese

For detailed recipe notes, including *s, and cheesemaking tips please visit thistlerennet.com.

Ingredients:

Commercial

- 300L non-homogenized cow's milk*
- Thermophilic culture or lactic acid starter of your choice
- 165 ml Cynzime® liquid
- 45 ml CaCl₂ diluted in 1 cup of non-chlorinated water
- Salt brine 18%

Home or Trial Use**

- 8-16 L non-homogenized milk
- Thermophilic culture and lactic acid starter of your choice***
- 10 ml Cynzime® liquid (may have to adjust the dosage)***
- 2.5 ml CaCl₂ diluted in 1/4 cup of non-chlorinated water
- Salt brine 18%

Method:

1. Read the recipe thoroughly while sterilizing your equipment and cleaning your workstation.
2. Add the Diluted CaCl₂ to cold milk and begin to heat the milk, gently stir the milk as it is heating.
3. Once the milk reaches 13°C (55.4°F), draw off 500 mL of milk from the vat. Sprinkle the starter cultures onto the surface of the 500 mL of milk and allow the cultures to rehydrate for 5 minutes. During this time the vat of milk should still be heating.
4. Once the vat of milk reaches 15°C (59°F), add the hydrated starter cultures back to the vat of milk and stir to incorporate. Continue to heat the milk.

5. Once the milk reaches 36°C (97°F), add the Cynzime® liquid to the vat of milk and blend well using the paddle. Unlike with other rennets, the milk will have to be stirred well when using Cynzime.® Maintain the temperature at 36°C (97°F).
6. Allow the milk to rest for 2 ½ to 3 hours ***** at 36°C (97°F), before checking for clean breaks. If the curd does not break cleanly, maintain the temperature and check back every 10 minutes until a clean break has occurred. You may not get a traditional clean break, but usually the curds are ready to cut at 3 hours regardless of type of break
7. Next, cut the curd using the slow setting on the Vats cutter, or a knife, so that the curds have an approximate size of 1.5 inches. Allow the curds to rest for 5 minutes.
8. After the curds have rested, stir the curd gently with the paddle or large spoon, for 20 minutes.
9. Drain half the whey off of the vat, and add 60°C (140°F) water back to the vat. The amount of water added back should be equivalent to two thirds of the amount of whey removed. The addition of the water will bring the mixture up to 42°C (108°F). Stir the curd for 10 more minutes, and then pitch (allow curds to settle to the bottom of the vat) for 10 minutes.
10. Once the curds have settled to the bottom, insert a screen and drain the whey from the vat.
11. Move the curds to cheesecloth lined molds and press under light pressure (4 kg) for 30 minutes.
12. Then flip and redress the molds, and press under medium pressure (12-15 kg) for 6 to 12 hours or overnight.
13. Remove the cheese from the press and place in the brine for 12 to 24 hours (3 to 5 hours per kg of the wheels), flipping the cheese after half the time.
14. Remove the cheese from the brine and allow them to air dry for 4 days before placing them in an aging room (12-14°C and 85% humidity for 4 weeks). You may vacuum seal the wheels, coat with wax or brush daily to keep down on mold growth.



Enzyme Development Corporation®

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EDC is the manufacturer of **Cynzime®**, a natural plant extract with unique and versatile milk clotting properties.

All photos credited to: Winding Road Cheese