

INGREDIENTS

| | Grams | Bakers (%) | Usage Levels (%) |
|-------------------|-----------|------------|------------------|
| Flour, strong | 227.0 | 50 | 25.540 |
| Flour, pastry | 227.0 | 50 | 25.540 |
| Water (1) | 127.0 | 28 | 14.290 |
| Water (2) | 118.0 | 26 | 13.276 |
| Lactose | 68.0 | 15 | 7.650 |
| Cheese, parmesan | 45.0 | 10 | 5.063 |
| Butter (1) | 27.2 | 6 | 3.060 |
| Butter (2) | 18.0 | 4 | 2.025 |
| Salt | 13.6 | 3 | 1.530 |
| Dry malt | 4.5 | 1 | 0.506 |
| Yeast, gold | 4.5 | 1 | 0.506 |
| Red pepper flakes | 4.5 | 1 | 0.506 |
| Butter, softened* | as needed | as needed | as needed |
| Cheese, parmesan* | 68.0 | 14.97 | _ |
| Total | | | 100.00 |

'Additional ingredients not included in total

NUTRITIONAL CONTENT

Per 100g

| Calories | 430kcal |
|---------------------|---------|
| Total Fat | 11g |
| Saturated Fat | 7g |
| Trans Fat | Og |
| Cholesterol | 30mg |
| Total Carbohydrates | 67g |
| Dietary Fiber | 2g |
| Sugars | 11g |
| Protein | 14g |
| Calcium | 1mg |
| Magnesium | 17mg |
| Phosphorus | 208mg |
| Potassium | 125mg |
| Sodium | 1280mg |
| Iron | 1mg |
| Vitamin A | 527IU |
| Vitamin C | 1mg |
| | |

PREPARATION

- 1. In a bowl of a mixer fitted with a dough hook, mix strong flour, dry malt, parmesan, yeast, butter (1) and water (2) on low speed until incorporated. At that time, mix for an additional 4 minutes.
- 2. Remove from the bowl and let rest in a covered container for 14-18 hours at 27°C (80°F).
- 3. Add the sponge and pastry flour, red pepper flakes, lactose, baking soda, salt, butter (2) and water (1) into the bowl of a mixer fitted with a dough hook. Mix for 5 minutes. Check for "nearly" good gluten (not complete gluten structure).
- 4. Pull from bowl. Let rest, covered, for 2 hours.



PREPARATION

(continues)

- 5. Using a sheeter, sheet out dough into a 5 mm (0.2") rectangle.
- 6. Very lightly butter surface of 2/3 of the dough then spread the additional parmesan on the dough.
- 7. Make a three-fold (as in making puff dough). Repeat 2 more times.
- 8. Roll out to a 2 mm (0.08") thickness. With a scalloped edge cutter, cut dough into desired shapes
- 9. Bake in 135°C (275°F) oven until just a little color starts to appear on the edges.
- 10. Turn crackers over if necessary to make sure that they are dried completely in the core.
- 11. Cool to room temperature before packaging.

Rely on the dynamic lineup of U.S. dairy to meet consumer demands for global product development. The U.S. Dairy Export Council (USDEC) offers resources on **ThinkUSAdairy.org** including a dairy ingredient supplier search, consumer, nutrition and product research, technical insights and prototype assistance to help develop and launch your next successful product. (ThinkUSAdairy)

This formula serves as a reference. Product developers are encouraged to modify the formula to meet manufacturing and finished product specification needs. Developed by the International School of Baking. ©2014 U.S. Dairy Export Council.

