

Artoklasia

Menu Item: Artoklasia

Yield: 5 loaves
1.56 lb each (est.)

Ingredients	Bakers' %	Recipe Quantities	
		Wt/Vol/	
		Count	unit
Preferment			
King Arthur Sir Galahad Flour	44.97%	2.305	lb
King Arthur White Whole Wheat Flour	5.03%	4.125	oz
yeast, instant dry	0.78%	5.750	tsp
Liquid:	28.05%		
milk	19.51%	1.000	pt
water	8.54%	7.000	oz
Main dough			
King Arthur Sir Galahad Flour	44.97%	2.305	lb
King Arthur White Whole Wheat Flour	5.03%	4.125	oz
nonfat dry milk powder		3.200	oz
sugar, granulated	16.01%	13.125	oz
salt	2.01%	8.250	tsp
orange zest, from oranges to be juiced	--	--	
butter, unsalted, at room temperature	16.01%	13.125	oz
Liquid	26.83%		
water	19.51%	1.000	pt
orange juice	7.32%	6.000	oz
spice mixture, very finely ground†	--	1.5	tsp
[OR Mastica (solid resin), v finely ground	--	1	tsp]
[OR Mahlepi, very finely ground	--	1	tsp]
Sum B%	189.68%		

Ingredients, TOTALS, as used	Bakers' %	Quant. Used		Quant. Used			
		Wt/Vol/		Count	unit		
		Wt	lb				
Total Flour	100.00%			5.125	lb		
King Arthur Sir Galahad Flour		89.94%		4.609	lb		
King Arthur White Whole Wheat Flour		10.06%		0.516	lb		
yeast, instant dry*	0.78%			5.7500	tsp		
nonfat dry milk powder				3.200	oz		
sugar, granulated	16.01%			13.1250	oz		
Liquid:	54.88%			2.813	lb		
milk		39.02%	1.0000	qt	2.000	lb	
water		8.54%	7.0000	oz	0.438	lb	
orange juice		7.32%	6.0000	oz	0.375	lb	
salt	2.01%			8.2500	tsp	0.103	lb
orange zest, from oranges to be juiced	--			--	--		
butter, unsalted, at room temperature	16.01%			13.1250	oz	0.820	lb
spice mixture, very finely ground†	--			1.5000	tsp		
[OR Mastica (solid resin), v finely ground	--			1.0000	tsp]		
[OR Mahlepi, very finely ground	--			1.0000	tsp]		
Totals:	189.68%	=		9.721	lb		

†Spice mixture — Grind very finely one tsp each of green cardamom seeds, mahlepi seeds, allspice berries, and anise seeds, plus 3 cloves.

Dough wt for 1 loaf: 31.108 oz
Est. baked wt for 1 loaf: 24.886 oz

Notes & conversion factors

Desired weight of each loaf, lb (L)	1.5	lb	
% weight loss during baking (W)	25.00%	(assumed)	
Estimated total dough weight of five 1.5 lb loaves (est. as: $5 * L * (1.0 + W)$)	9.375	lb	 This was the initial design target weight of all ingredients. It was used for initial calculations of quantities during recipe development.

Conversion factors:

Milk quantity, 1 qt =	2	pt =	2	lb
(for water, orange juice, milk, butter, etc.:	1	pt =	1	lb)
SAF Gold Instant yeast	9.00	tsp/oz =	3.00	tbsp/oz
Salt	5.00	tsp/oz		