

# King Arthur

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **37**
- SRM **9**
- Style **Extra Special/Strong Bitter (English Pale Ale)**

## Batch size

- Expected quantity of finished beer **25.5 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.8 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **32.7 liter(s)**

## Mash information

- Mash efficiency **79.5 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **17.9 liter(s)**
- Total mash volume **23.8 liter(s)**

## Steps

- Temp **62 C**, Time **50 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **17.9 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **50 min** at **62C**
- Keep mash **15 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **20.8 liter(s)** of **76C** water or to achieve **32.7 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	5 kg (84%)	85 %	5
Grain	Strzegom Karmel 300	0.25 kg (4.2%)	85 %	299
Grain	pszeniczny ciemny	0.2 kg (3.4%)	80 %	14
Grain	Strzegom Monachijski typ II	0.2 kg (3.4%)	80 %	22
Grain	Brown Malt (British Chocolate)	0.1 kg (1.7%)	80 %	128
Grain	Pszeniczny	0.2 kg (3.4%)	80 %	4

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Fuggles	50 g	60 min	6.1 %
Boil	Perle	40 g	15 min	4.4 %
Boil	Perle	20 g	15 min	4.4 %

## Yeasts

Name	Type	Form	Amount	Laboratory
------	------	------	--------	------------

FM10 O czym szumią wierzby	Ale	Liquid	1000 ml	Fermentum Mobile
----------------------------	-----	--------	---------	------------------

### Extras

Type	Name	Amount	Use for	Time
Water Agent	gips piwowarski	5 g	Mash	---
Fining	mech irlandzki	5 g	Boil	15 min

### Notes

- Warka XXIII  
uzyskałem ~25l ~12blg.  
po gotowaniu:  
13,1 blg  
temperatura fermentacji 19stopni (równno, bo w lodówce).  
cicha 9 dni w temp 15,8  
blg końcowe 2,5  
*Dec 8, 2017, 5:41 PM*