

## wakacje w arkham v.4

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- Gravity **15.4 BLG**
- ABV **6.5 %**
- IBU **90**
- SRM **3.9**
- Style **American IPA**

### Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **5 %**
- Size with trub loss **17.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **21.6 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **17.5 liter(s)**
- Total mash volume **22.5 liter(s)**

### Steps

- Temp **64 C**, Time **15 min**
- Temp **72 C**, Time **45 min**
- Temp **76 C**, Time **1 min**

### Mash step by step

- Heat up **17.5 liter(s)** of strike water to **70.3C**
- Add grains
- Keep mash **15 min** at **64C**
- Keep mash **45 min** at **72C**
- Keep mash **1 min** at **76C**
- Sparge using **9.1 liter(s)** of **76C** water or to achieve **21.6 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	castlemalting pilsen	3.2 kg (64%)	80.5 %	3
Grain	Słód pszeniczny Bestmalz	1 kg (20%)	82 %	5
Grain	Płatki owsiane	0.8 kg (16%)	85 %	3

### Hops

Use for	Name	Amount	Time	Alpha acid
Aroma (end of boil)	Cascade PL	55 g	5 min	3.8 %
Whirlpool	Mosaic	50 g	30 min	11.1 %
Whirlpool	Citra	50 g	30 min	12.2 %
Whirlpool	Sabro	50 g	30 min	13.6 %
Dry Hop	Mosaic	50 g	3 day(s)	11.1 %
Dry Hop	Citra	50 g	3 day(s)	12.2 %
Dry Hop	Sabro	50 g	3 day(s)	13.6 %

### Yeasts

Name	Type	Form	Amount	Laboratory
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Wyeast - London Ale III	Ale	Slant	200 ml	---
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