

## Pałac Brzeźno - Axe 2018 (#1,2,3,4)

- Gravity **15.4 BLG**
- ABV **6.5 %**
- IBU **69**
- SRM **7.1**
- Style **American IPA**

### Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.7 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **20.3 liter(s)**
- Total mash volume **27 liter(s)**

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Briess - Pale Ale Malt	3.75 kg (55.6%)	80 %	7
Grain	Monachijski	2.5 kg (37%)	80 %	16
Grain	Pszeniczny	0.5 kg (7.4%)	85 %	4

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	8 g	55 min	15.5 %
Boil	Chinook	8.5 g	55 min	13 %
Boil	Apollo	8.5 g	55 min	17 %
Boil	Citra	16.5 g	55 min	12 %
Aroma (end of boil)	Columbus/Tomahawk/Zeus	8 g	10 min	15.5 %
Aroma (end of boil)	Chinook	8.5 g	10 min	13 %
Aroma (end of boil)	Apollo	8.5 g	10 min	17 %
Aroma (end of boil)	Citra	16.5 g	10 min	12 %
Whirlpool	Columbus/Tomahawk/Zeus	8 g	0 min	15.5 %
Whirlpool	Chinook	8.5 g	0 min	13 %
Whirlpool	Apollo	8.5 g	0 min	17 %
Whirlpool	Citra	16.5 g	0 min	12 %
Dry Hop	Simcoe	8 g	3 day(s)	13.2 %
Dry Hop	Summit	8.5 g	3 day(s)	17 %
Dry Hop	Amarillo	8.5 g	3 day(s)	9.5 %
Dry Hop	Citra	25 g	3 day(s)	12 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	23 g	Fermentis