

## Drugie piwo 2019

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- Gravity **13.8 BLG**
- ABV **5.7 %**
- IBU **87**
- SRM **20.4**
- Style **Black IPA**

### Batch size

- Expected quantity of finished beer **18 liter(s)**
- Trub loss **5 %**
- Size with trub loss **18.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **22.8 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **20 liter(s)**

### Steps

- Temp **67 C**, Time **60 min**

### Mash step by step

- Heat up **15 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Sparge using **12.8 liter(s)** of **76C** water or to achieve **22.8 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	3.1 kg (61.9%)	80 %	5
Grain	Pszeniczny	0.5 kg (10%)	85 %	4
Grain	Monachijski	0.5 kg (10%)	80 %	16
Grain	Płatki owsiane	0.5 kg (10%)	85 %	3
Grain	Słód Caramunich Typ II Weyermann	0.235 kg (4.7%)	73 %	120
Grain	Extra black	0.17 kg (3.4%)	65 %	1400

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	50 g	60 min	12.5 %
Whirlpool	Motueka	45 g	15 min	8 %
Whirlpool	Columbus/Tomahawk/Zeus	10 g	15 min	12.5 %
Dry Hop	Motueka	40 g	5 day(s)	8 %
Dry Hop	Centennial	50 g	5 day(s)	10.5 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Slant	1000 ml	Fermentis

### Notes

Recipe has been printed via **BREWNES.com** - a complex online solution for homebrewers to track brewing process easily.

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