

## Drugie podejście

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- Gravity **16.1 BLG**
- ABV **6.8 %**
- IBU **38**
- SRM **17.5**
- Style **American IPA**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

### Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **21 liter(s)**
- Total mash volume **28 liter(s)**

### Steps

- Temp **72 C**, Time **45 min**
- Temp **78 C**, Time **5 min**

### Mash step by step

- Heat up **21 liter(s)** of strike water to **80.7C**
- Add grains
- Keep mash **45 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **11.3 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pilsner malt	2 kg (28.6%)	82 %	4
Grain	Strzegom Monachijski typ I	2 kg (28.6%)	79 %	16
Grain	Viking Pale Ale malt	2 kg (28.6%)	80 %	5
Grain	Strzegom Karmel 400	0.5 kg (7.1%)	70 %	400
Grain	golden	0.5 kg (7.1%)	80 %	11

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Herkules	20 g	60 min	17 %
Whirlpool	Ahtanum	30 g	30 min	5 %
Dry Hop	Cascade PL	100 g	3 day(s)	5.2 %