

## PIWO #4

---

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **41**
- SRM **5.6**
- Style **American IPA**

### Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **5 %**
- Size with trub loss **15.8 liter(s)**
- Boil time **45 min**
- Evaporation rate **10 %/h**
- Boil size **18.6 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12 liter(s)**
- Total mash volume **16 liter(s)**

### Steps

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

### Mash step by step

- Heat up **12 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Sparge using **10.6 liter(s)** of **76C** water or to achieve **18.6 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	3.5 kg (87.5%)	80 %	5
Grain	Strzegom Karmel 30	0.5 kg (12.5%)	75 %	30

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Galaxy	10 g	40 min	15.8 %
Boil	Galaxy	15 g	15 min	15.8 %
Boil	Galaxy	10 g	5 min	15.8 %
Dry Hop	Galaxy	15 g	5 day(s)	15.8 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11.5 g	Fermentis