

IPA plus Warjacje

- Gravity **15.9 BLG**
- ABV **6.7 %**
- IBU **37**
- SRM **4.5**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **66 liter(s)**
- Trub loss **2 %**
- Size with trub loss **68.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **7 %/h**
- Boil size **78.4 liter(s)**

Mash information

- Mash efficiency **77 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **60 liter(s)**
- Total mash volume **80 liter(s)**

Steps

- Temp **65 C**, Time **60 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **60 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **60 min** at **65C**
- Keep mash **5 min** at **78C**
- Sparge using **38.4 liter(s)** of **76C** water or to achieve **78.4 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pilsner malt	14.5 kg (72.5%)	82 %	4
Grain	Weyermann pszeniczny jasny	4 kg (20%)	80 %	6
Grain	Płatki owsiane	1.5 kg (7.5%)	60 %	3

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	140 g	10 min	10.3 %
Whirlpool	Mandarina Bavaria	200 g	30 min	9.1 %