

PL IPA

- Gravity **14 BLG**
- ABV **5.8 %**
- IBU **33**
- SRM **4.6**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **18 liter(s)**
- Trub loss **5 %**
- Size with trub loss **19.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **8 %/h**
- Boil size **22.1 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **14.1 liter(s)**
- Total mash volume **18.8 liter(s)**

Steps

- Temp **68 C**, Time **50 min**
- Temp **72 C**, Time **10 min**

Mash step by step

- Heat up **14.1 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **50 min** at **68C**
- Keep mash **10 min** at **72C**
- Sparge using **12.7 liter(s)** of **76C** water or to achieve **22.1 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	4.3 kg (91.5%)	80 %	5
Grain	Cookie	0.2 kg (4.3%)	--- %	---
Grain	Strzegom Karmel 30	0.2 kg (4.3%)	75 %	30

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Lomik	50 g	60 min	3.8 %
Boil	Izabella	50 g	5 min	5.1 %
Whirlpool	Zula	50 g	5 min	8.3 %

Yeasts

Name	Type	Form	Amount	Laboratory
Mangrove Jack's M36 Liberty Bell Ale	Ale	Dry	10 g	Mangrove Jack's