

IPA

- Gravity **13.6 BLG**
- ABV **5.6 %**
- IBU **57**
- SRM **7.3**
- 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 **80 %**
- Liquor-to-grist ratio **3.07 liter(s) / kg**
- Mash size **15.5 liter(s)**
- Total mash volume **20.6 liter(s)**

Steps

- Temp **54 C**, Time **10 min**
- Temp **66 C**, Time **80 min**
- Temp **76 C**, Time **10 min**

Mash step by step

- Heat up **15.5 liter(s)** of strike water to **59.5C**
- Add grains
- Keep mash **10 min** at **54C**
- Keep mash **80 min** at **66C**
- Keep mash **10 min** at **76C**
- Sparge using **14.9 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	2.2 kg (43.6%)	81 %	4
Grain	Monachijski	2.5 kg (49.5%)	80 %	19
Grain	Karmelowy Jasny 30EBC	0.35 kg (6.9%)	75 %	30

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	50 g	60 min	10 %
Boil	Iubelski	40 g	10 min	3 %

Yeasts

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