

- Gravity **21.8 BLG**
- ABV **9.8 %**
- IBU **28**
- SRM **9.7**
- Style **Imperial 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 **24.9 liter(s)**

### Mash information

- Mash efficiency **60 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **33 liter(s)**
- Total mash volume **44 liter(s)**

### Steps

- Temp **63 C**, Time **60 min**
- Temp **72 C**, Time **20 min**
- Temp **76 C**, Time **1 min**

### Mash step by step

- Heat up **33 liter(s)** of strike water to **70.2C**
- Add grains
- Keep mash **60 min** at **63C**
- Keep mash **20 min** at **72C**
- Keep mash **1 min** at **76C**
- Sparge using **2.9 liter(s)** of **76C** water or to achieve **24.9 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	5 kg (45.5%)	81 %	4
Grain	Carared	1 kg (9.1%)	75 %	39
Grain	Briess - Pale Ale Malt	5 kg (45.5%)	80 %	7

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	El Dorado	30 g	60 min	12 %