

## English IPA

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- Gravity **15 BLG**
- ABV **6.2 %**
- IBU **41**
- SRM **6.6**
- Style **English 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 liter(s) / kg**
- Mash size **16.8 liter(s)**
- Total mash volume **22.4 liter(s)**

### Steps

- Temp **66 C**, Time **80 min**
- Temp **78 C**, Time **10 min**

### Mash step by step

- Heat up **16.8 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **80 min** at **66C**
- Keep mash **10 min** at **78C**
- Sparge using **14.1 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	4 kg (71.4%)	80 %	5
Grain	Pilzneński	1.2 kg (21.4%)	81 %	4
Grain	Strzegom Karmel 150	0.2 kg (3.6%)	75 %	150
Grain	Weyermann - Carapils	0.2 kg (3.6%)	78 %	4

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Bravo	15 g	60 min	15.5 %
Boil	Challenger	10 g	60 min	7 %
Boil	Challenger	20 g	20 min	7 %
Aroma (end of boil)	Willamette	20 g	5 min	5 %
Whirlpool	Willamette	30 g	1 min	5 %

### Yeasts

Name	Type	Form	Amount	Laboratory
safale S-04	Lager	Dry	11 g	---