

## #13 Imperial IPA 101 IBU

- Gravity **18.9 BLG**
- ABV **8.2 %**
- IBU **101**
- SRM **10.1**
- Style **Imperial IPA**

### Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **5 %**
- Size with trub loss **15.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **19 liter(s)**

### Mash information

- Mash efficiency **69 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **10.5 liter(s)**
- Total mash volume **14 liter(s)**

### Steps

- Temp **67 C**, Time **50 min**
- Temp **77 C**, Time **10 min**

### Mash step by step

- Heat up **10.5 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **50 min** at **67C**
- Keep mash **10 min** at **77C**
- Sparge using **12 liter(s)** of **76C** water or to achieve **19 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pale Ale Malt	3 kg (57.7%)	85 %	7
Liquid Extract	Bruntal Pale Ale	1.7 kg (32.7%)	80 %	35
Grain	Weyermann - Carapils	0.5 kg (9.6%)	78 %	4

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	40 g	30 min	14.6 %
Boil	Amarillo	15 g	20 min	7.1 %
Boil	Citra	10 g	20 min	13.8 %
Boil	Citra	20 g	15 min	13.8 %
Boil	Citra	30 g	10 min	13.8 %

### Yeasts

Name	Type	Form	Amount	Laboratory
US-05 Gęstwa dość gesta	Ale	Slant	200 ml	Fermentis