

Brut IPA (w. robocza)

- Gravity **14.3 BLG**
- ABV **5.9 %**
- IBU **38**
- SRM **3.9**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **5 %**
- Size with trub loss **10.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **12.7 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **8.7 liter(s)**
- Total mash volume **11.6 liter(s)**

Steps

- Temp **64 C**, Time **45 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **8.7 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **45 min** at **64C**
- Keep mash **15 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **6.9 liter(s)** of **76C** water or to achieve **12.7 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Bohemian Pilsner Malt	2.5 kg (86.2%)	81 %	4
Grain	Rice, Flaked	0.4 kg (13.8%)	70 %	2

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	5 g	60 min	15.3 %
Boil	Citra	10 g	30 min	14.1 %
Whirlpool	Citra	10 g	0 min	14.1 %
Whirlpool	Nelson Sauvín	10 g	0 min	12.3 %
Whirlpool	Columbus/Tomahawk/Zeus	10 g	0 min	15.3 %
Dry Hop	Citra	30 g	4 day(s)	14.1 %
Dry Hop	Nelson Sauvín	30 g	4 day(s)	12.3 %

Yeasts

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

Extras

Type	Name	Amount	Use for	Time
Water Agent	pirosiarczan sodu	3 g	Boil	60 min