

#89 Brut IPA

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **52**
- SRM **3.7**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **11.5 liter(s)**
- Trub loss **4 %**
- Size with trub loss **12.4 liter(s)**
- Boil time **70 min**
- Evaporation rate **14 %/h**
- Boil size **15.4 liter(s)**

Mash information

- Mash efficiency **64 %**
- Liquor-to-grist ratio **4.35 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **18.5 liter(s)**

Steps

- Temp **64 C**, Time **40 min**
- Temp **72 C**, Time **32 min**
- Temp **76 C**, Time **2 min**

Mash step by step

- Heat up **15 liter(s)** of strike water to **69.1C**
- Add grains
- Keep mash **40 min** at **64C**
- Keep mash **32 min** at **72C**
- Keep mash **2 min** at **76C**
- Sparge using **3.9 liter(s)** of **76C** water or to achieve **15.4 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	BESTMALZ - Best Heidelberg	2.9 kg (84.1%)	80.5 %	3
Grain	Platki owsiane	0.35 kg (10.1%)	85 %	3
Grain	Wheat, Torrified	0.2 kg (5.8%)	79 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Iunga	7 g	50 min	11 %
Aroma (end of boil)	Citra	25 g	6 min	13.7 %
Whirlpool	Citra	30 g	10 min	13.3 %
Whirlpool	Simcoe	21 g	10 min	13.7 %
Dry Hop	Citra	55 g	4 day(s)	13.3 %

Yeasts

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

Extras

Type	Name	Amount	Use for	Time
Other	Glukoamylaza	1 g	Mash	40 min
Water Agent	Gips piwowarski	2 g	Mash	50 min
Water Agent	Chlorek wapnia	1 g	Mash	50 min
Fining	WhirlFloc	2.5 g	Boil	12 min
Other	Glukoamylaza	1 g	Primary	10 day(s)