

10. BIPA

- Gravity **14 BLG**
- ABV **5.8 %**
- IBU **59**
- SRM **27.1**
- Style **Black IPA**

Batch size

- Expected quantity of finished beer **19 liter(s)**
- Trub loss **4 %**
- Size with trub loss **20.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **12 %/h**
- Boil size **23.9 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **20.1 liter(s)**
- Total mash volume **25.8 liter(s)**

Steps

- Temp **65 C**, Time **60 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **20.1 liter(s)** of strike water to **71.4C**
- Add grains
- Keep mash **60 min** at **65C**
- Keep mash **5 min** at **78C**
- Sparge using **9.5 liter(s)** of **76C** water or to achieve **23.9 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	4.55 kg (79.4%)	79 %	6
Grain	Strzegom Karmel 150	0.26 kg (4.5%)	75 %	150
Grain	Strzegom Karmel 30	0.37 kg (6.5%)	75 %	30
Grain	Weyermann - Carafa I	0.55 kg (9.6%)	70 %	690

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Simcoe	13 g	60 min	13.2 %
Aroma (end of boil)	Simcoe	19 g	30 min	13.2 %
Aroma (end of boil)	Simcoe	13 g	10 min	13.2 %
Aroma (end of boil)	Amarillo	13 g	10 min	9.5 %
Aroma (end of boil)	Citra	13 g	10 min	12 %
Dry Hop	Simcoe	60 g	3 day(s)	13.2 %
Dry Hop	Amarillo	60 g	3 day(s)	9.5 %
Dry Hop	Citra	60 g	3 day(s)	12 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Slant	200 ml	Fermentis