

Black IPA

- Gravity **14 BLG**
- ABV **5.8 %**
- IBU **44**
- SRM **33.4**
- Style **Black IPA**

Batch size

- Expected quantity of finished beer **45 liter(s)**
- Trub loss **8 %**
- Size with trub loss **52.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **7 %/h**
- Boil size **60.2 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **31.5 liter(s)**
- Total mash volume **42 liter(s)**

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pilsner malt	10 kg (82%)	82 %	4
Liquid Extract	Gozdawa ekstrakt słodowy ciemny	1.7 kg (13.9%)	80 %	650
Grain	Weyermann - Dehusked Carafo III	0.5 kg (4.1%)	70 %	1024

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	30 g	60 min	16 %
Boil	Simcoe	10 g	30 min	13.2 %
Boil	Citra	10 g	30 min	12 %
Boil	Mosaic	10 g	30 min	10 %
Boil	Simcoe	15 g	15 min	13.2 %
Boil	Citra	15 g	15 min	12 %
Boil	Mosaic	15 g	15 min	10 %
Aroma (end of boil)	Simcoe	15 g	1 min	13.2 %
Aroma (end of boil)	Citra	15 g	1 min	12 %
Aroma (end of boil)	Mosaic	15 g	1 min	10 %

Yeasts

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