

Black Hole IPA

- Gravity **16.2 BLG**
- ABV ---
- IBU **81**
- SRM **40**
- Style **Black IPA**

Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss --- %
- Size with trub loss --- liter(s)
- Boil time **60 min**
- Evaporation rate --- %/h
- Boil size --- liter(s)

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio --- liter(s) / kg
- Mash size **16 liter(s)**
- Total mash volume **22 liter(s)**

Steps

- Temp **67 C**, Time **60 min**

Mash step by step

- Heat up **16 liter(s)** of strike water to **75.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Sparge using **-10 liter(s)** of **76C** water

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pale Ale	5 kg	80 %	6
Grain	Pszeniczny	0.5 kg	85 %	4
Grain	Carafa Special II	0.2 kg	55 %	1100
Grain	Czekoladowy ciemny	0.3 kg	55 %	1100

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Tomahawk	30 g	60 min	15.5 %
Boil	Magnum	25 g	60 min	12 %
Boil	Iunga	15 g	30 min	11 %
Aroma (end of boil)	Citra	10 g	0 min	12 %
Dry Hop	Simcoe	25 g	4 day(s)	13 %
Dry Hop	Citra	40 g	4 day(s)	12 %
Dry Hop	Cascade	20 g	4 day(s)	6 %
Dry Hop	Mosaic	50 g	4 day(s)	10 %

Yeasts

Name	Type	Form	Amount	Laboratory
US-05	Ale	Slant	100 ml	Fermentis

Extras

Type	Name	Amount	Use for	Time
Water Agent	Gips	15 g	Mash	---