

# Black IPA a'la Awaria Zasilania

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **28**
- SRM **33.6**
- Style **Black IPA**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.4 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **20 liter(s)**

## Steps

- Temp **66 C**, Time **60 min**

## Mash step by step

- Heat up **15 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Sparge using **16.4 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	4.47 kg (89.2%)	80 %	7
Grain	Strzegom Czekoladowy ciemny	0.3 kg (6%)	68 %	1200
Grain	cafara special typ II	0.08 kg (1.6%)	--- %	1200
Grain	cafara special typ III	0.08 kg (1.6%)	--- %	1500
Grain	black bruntal	0.08 kg (1.6%)	--- %	1300

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	15 g	45 min	15.5 %
Boil	Simcoe	35 g	1 min	13.2 %
Boil	Columbus/Tomahawk/Zeus	35 g	1 min	15.5 %
Dry Hop	Simcoe	70 g	3 day(s)	13.2 %
Dry Hop	Columbus/Tomahawk/Zeus	70 g	3 day(s)	15.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11 g	Fermentis