

# Polish Black IPA

- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **41**
- SRM **31.3**
- 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 **16.5 liter(s)**
- Total mash volume **22 liter(s)**

## Steps

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

## Mash step by step

- Heat up **16.5 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Sparge using **15.4 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	4.5 kg (81.8%)	80 %	4
Grain	Czekoladowy	0.2 kg (3.6%)	60 %	788
Grain	Jęczmień palony	0.2 kg (3.6%)	55 %	985
Grain	Toasted Malt	0.3 kg (5.5%)	71.7 %	53
Grain	Weyermann - Carafa II	0.3 kg (5.5%)	70 %	837

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnat	30 g	60 min	11.2 %
Aroma (end of boil)	Izabella	50 g	5 min	6 %
Dry Hop	Izabella	50 g	5 day(s)	6 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11 g	Safale