

# Polsko-Českie Dark Ale

- Gravity **13.8 BLG**
- ABV ---
- IBU **63**
- SRM **38.6**
- Style **Black IPA**

## Batch size

- Expected quantity of finished beer **17 liter(s)**
- Trub loss **10 %**
- Size with trub loss **20.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **27.4 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **18.8 liter(s)**
- Total mash volume **23.5 liter(s)**

## Steps

- Temp **65 C**, Time **45 min**
- Temp **76 C**, Time **10 min**

## Mash step by step

- Heat up **18.8 liter(s)** of strike water to **70.6C**
- Add grains
- Keep mash **45 min** at **65C**
- Keep mash **10 min** at **76C**
- Sparge using **13.3 liter(s)** of **76C** water or to achieve **27.4 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	3 kg (63.8%)	79 %	7
Grain	Strzegom Monachijski typ I	1 kg (21.3%)	79 %	20
Grain	Extra black	0.3 kg (6.4%)	65 %	1400
Grain	Oats, Flaked	0.4 kg (8.5%)	80 %	2

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	40 g	60 min	10.5 %
Boil	Magnum	10 g	60 min	12 %
Whirlpool	lunga	10 g	0 min	11 %
Whirlpool	Sybilla	10 g	0 min	3.5 %
Whirlpool	Kezбек	10 g	0 min	4.6 %
Dry Hop	Sybilla	50 g	4 day(s)	3.5 %
Dry Hop	Kezбек	60 g	4 day(s)	4.6 %
Dry Hop	lunga	40 g	4 day(s)	11 %

## Yeasts

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

Type	Name	Amount	Use for	Time
Water Agent	Gips piwowarski	10 g	Mash	---