

# Szwagier, Sąsiad i Ja #3 - Black IPA - Browar na Wyżynie

- Gravity **16.1 BLG**
- ABV **6.8 %**
- IBU **56**
- SRM **30.7**
- Style **Black IPA**

## Batch size

- Expected quantity of finished beer **16 liter(s)**
- Trub loss **6 %**
- Size with trub loss **17 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **19.4 liter(s)**

## Mash information

- Mash efficiency **72 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **17 liter(s)**
- Total mash volume **22.7 liter(s)**

## Steps

- Temp **67 C**, Time **45 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **17 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **45 min** at **67C**
- Keep mash **15 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **8.1 liter(s)** of **76C** water or to achieve **19.4 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	pilzneński Viking Malt	3.65 kg (64.4%)	80 %	5
Grain	monachijski typ I Viking Malt	0.85 kg (15%)	78 %	18
Grain	karmelowy 300 - Viking Malt	0.3 kg (5.3%)	70 %	300
Grain	czekoladowy ciemny Viking Malt	0.27 kg (4.8%)	1 %	1200
Grain	płatki owsiane błyskawiczne	0.6 kg (10.6%)	50 %	3

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Junga (PL) - granulát	20 g	60 min	12.5 %
Boil	Equanot (USA) - granulát	10 g	20 min	16.1 %
Boil	Equanot (USA) - granulát	10 g	2 min	16.1 %
Aroma (end of boil)	Equanot (USA) - granulát	40 g	3 min	16.1 %

Dry Hop	Equanot (USA) - granulat	40 g	3 day(s)	16.1 %
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### Yeasts

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

### Notes

- Sól czekoladowy zaparzany w 72C przez 10 minut.  
Chmiel na whirlpool na 30 minut w 80C  
*Nov 28, 2017, 10:57 AM*