

Czarno jak w dym

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **24**
- SRM **24.6**
- Style **Other Smoked Beer**

Batch size

- Expected quantity of finished beer **17 liter(s)**
- Trub loss **5 %**
- Size with trub loss **17.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **14 %/h**
- Boil size **22.5 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **13.1 liter(s)**
- Total mash volume **17.5 liter(s)**

Steps

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

Mash step by step

- Heat up **13.1 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **45 min** at **67C**
- Keep mash **10 min** at **78C**
- Sparge using **13.8 liter(s)** of **76C** water or to achieve **22.5 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Słód Pale Ale	2.2 kg (50.3%)	79 %	6
Grain	Słód wędzony Steinbach	1 kg (22.9%)	--- %	5.3
Grain	Słód karmelowy 50 (Viking Malt)	0.3 kg (6.9%)	--- %	50
Grain	Słód Carafa typ I	0.25 kg (5.7%)	--- %	900
Grain	Słód pszeniczny czekoladowy	0.12 kg (2.7%)	--- %	900
Grain	Płatki owsiane	0.5 kg (11.4%)	--- %	3

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Lubelski	20 g	60 min	5.6 %
Boil	Lubelski	20 g	20 min	5.6 %

Yeasts

Name	Type	Form	Amount	Laboratory
WLP004 - Irish Ale Yeast	Ale	Liquid	1000 ml	White Labs

Extras

Recipe has been printed via **BREWNESS.com** - a complex online solution for homebrewers to track brewing process easily.

Type	Name	Amount	Use for	Time
Fining	Whirlflock	6 g	Boil	15 min