

Mocny Czarny Dym 20l

- Gravity **15.7 BLG**
- ABV **6.6 %**
- IBU **36**
- SRM **41**
- Style **Foreign Extra Stout**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **82 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18.3 liter(s)**
- Total mash volume **24.4 liter(s)**

Steps

- Temp **68 C**, Time **60 min**
- Temp **68 C**, Time **15 min**
- Temp **68 C**, Time **10 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **18.3 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **15 min** at **68C**
- Keep mash **10 min** at **68C**
- Keep mash **60 min** at **68C**
- Keep mash **5 min** at **78C**
- Sparge using **13.1 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	3.3 kg (54.1%)	79 %	6
Grain	Wędzony bukiem Viking Malt	1.1 kg (18%)	82 %	10
Grain	Fawcett - Pale Chocolate	0.3 kg (4.9%)	71 %	600
Grain	Chocolate Malt (UK)	0.3 kg (4.9%)	73 %	887
Grain	Jęczmień palony	0.4 kg (6.6%)	55 %	985
Grain	Brown Malt (British Chocolate)	0.3 kg (4.9%)	70 %	128
Grain	Barley, Flaked	0.4 kg (6.6%)	70 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Target	35 g	60 min	10.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
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Safale S-04	Ale	Dry	11.5 g	Safale
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