

Czarny Dym 5l

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **34**
- SRM **36.3**
- Style **Dry Stout**

Batch size

- Expected quantity of finished beer **5 liter(s)**
- Trub loss **5 %**
- Size with trub loss **5.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **6.4 liter(s)**

Mash information

- Mash efficiency **77 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **3.8 liter(s)**
- Total mash volume **5.1 liter(s)**

Steps

- Temp **52 C**, Time **10 min**
- Temp **68 C**, Time **80 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **3.8 liter(s)** of strike water to **57.4C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **80 min** at **68C**
- Keep mash **10 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **3.9 liter(s)** of **76C** water or to achieve **6.4 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	0.69 kg (53.9%)	79 %	6
Grain	Wędzony bukiem Viking Malt	0.23 kg (18.5%)	82 %	10
Grain	Fawcett - Pale Chocolate	0.06 kg (4.7%)	71 %	600
Grain	Chocolate Malt (UK)	0.06 kg (4.7%)	73 %	887
Grain	Jęczmień palony	0.09 kg (6.7%)	55 %	985
Grain	Barley, Flaked	0.09 kg (6.7%)	70 %	4
Grain	Brown Malt (British Chocolate)	0.06 kg (4.7%)	70 %	128

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Target	7.29 g	60 min	10.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
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Safale S-04	Ale	Dry	2.4 g	Safale
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