

Wesoła Smoła

- Gravity **16.8 BLG**
- ABV **7.1 %**
- IBU **43**
- SRM **48.2**
- Style **Foreign Extra Stout**

Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.6 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **2.9 liter(s) / kg**
- Mash size **20.4 liter(s)**
- Total mash volume **27.5 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 **20.4 liter(s)** of strike water to **76.3C**
- 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 **12.3 liter(s)** of **76C** water or to achieve **25.6 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	4.1 kg (54.3%)	79 %	6
Grain	Słód Wędzony Steinbach	1.25 kg (16.6%)	80 %	5
Grain	Brown Malt (British Chocolate)	0.4 kg (5.3%)	70 %	128
Grain	Chocolate Malt (UK)	0.4 kg (5.3%)	73 %	887
Grain	Fawcett - Pale Chocolate	0.4 kg (5.3%)	71 %	600
Grain	Jęczmień palony	0.5 kg (6.6%)	55 %	985
Adjunct	Briess - Barley Flakes	0.5 kg (6.6%)	70 %	3

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Target	45 g	60 min	10.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
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US-05	Ale	Dry	11.5 g	Safale
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