

God hates us all

- Gravity **13.5 BLG**
- ABV ---
- IBU **46**
- SRM **40**
- Style **Robust Porter**

Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **10 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **26.6 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15.8 liter(s)**
- Total mash volume **21.1 liter(s)**

Steps

- Temp **66 C**, Time **60 min**

Mash step by step

- Heat up **15.8 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Sparge using **16.1 liter(s)** of **76C** water or to achieve **26.6 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	4.22 kg (80.1%)	79 %	6
Grain	Strzegom Czekoladowy ciemny	0.77 kg (14.6%)	68 %	1200
Grain	Karmelowy żytni Strzegom	0.28 kg (5.3%)	75 %	150

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Northern Brewer	44 g	60 min	9 %
Boil	Kent Goldings	22 g	10 min	5.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
Wyeast - London Ale III	Ale	Liquid	35 ml	Wyeast Labs

Extras

Type	Name	Amount	Use for	Time
Fining	Mech Irlandzki	4 g	Boil	10 min