

Polish Whisky Extra Stout

- Gravity **19.3 BLG**
- ABV **8.4 %**
- IBU **55**
- SRM **54.5**
- Style **Foreign Extra Stout**

Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **10 %**
- Size with trub loss **24.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **18 %/h**
- Boil size **32.5 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **25.8 liter(s)**
- Total mash volume **36 liter(s)**

Steps

- Temp **52 C**, Time **10 min**
- Temp **66 C**, Time **80 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **2 min**

Mash step by step

- Heat up **25.8 liter(s)** of strike water to **58.4C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **80 min** at **66C**
- Keep mash **10 min** at **72C**
- Keep mash **2 min** at **78C**
- Sparge using **17 liter(s)** of **76C** water or to achieve **32.5 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	3.5 kg (34%)	80 %	5
Grain	Viking Malt Wędzony torfem	3.5 kg (34%)	82 %	10
Grain	Strzegom Pszeniczny	1 kg (9.7%)	81 %	6
Grain	Płatki owsiane	0.8 kg (7.8%)	85 %	3
Grain	Strzegom Czekoladowy ciemny	0.5 kg (4.9%)	68 %	1200
Grain	Strzegom pszenica prażona	0.5 kg (4.9%)	70 %	1000
Grain	Jęczmień palony	0.5 kg (4.9%)	55 %	985

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	50 g	50 min	12.9 %
Boil	Perle	25 g	20 min	4.4 %
Aroma (end of boil)	Perle	25 g	10 min	4.4 %
Aroma (end of boil)	Lublin (Lubelski)	25 g	10 min	4 %

Aroma (end of boil)	Lublin (Lubelski)	25 g	5 min	4 %
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Yeasts

Name	Type	Form	Amount	Laboratory
Safeale US-04	Ale	Dry	20 g	---

Extras

Type	Name	Amount	Use for	Time
Flavor	Curacao	40 g	Boil	10 min