

Foreign extra stout

- Gravity **20.2 BLG**
- ABV **8.9 %**
- IBU **51**
- SRM **34.1**
- Style **Foreign Extra Stout**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **26.8 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2.2 liter(s) / kg**
- Mash size **19.4 liter(s)**
- Total mash volume **28.2 liter(s)**

Steps

- Temp **65 C**, Time **60 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **1 min**

Mash step by step

- Heat up **19.4 liter(s)** of strike water to **75.2C**
- Add grains
- Keep mash **60 min** at **65C**
- Keep mash **15 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **16.2 liter(s)** of **76C** water or to achieve **26.8 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	3.5 kg (39.8%)	82 %	7
Grain	Strzegom Wiedeński	3 kg (34.1%)	80 %	12
Grain	Strzegom Pszeniczny	1 kg (11.4%)	81 %	6
Grain	Karmelowy Pszeniczny Strzegom	0.5 kg (5.7%)	79 %	130
Grain	Weyermann - Chocolate Rye	0.3 kg (3.4%)	20 %	493
Grain	Weyermann - Chocolate Wheat	0.3 kg (3.4%)	74 %	788
Grain	Carafa III	0.2 kg (2.3%)	70 %	1034

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	50 g	60 min	10 %
Boil	Columbus/Tomahawk/Zeus	50 g	5 min	15.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
------	------	------	--------	------------

Safale US-05	Ale	Slant	200 ml	Fermentis
--------------	-----	-------	--------	-----------