

Dry Stout

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **34**
- SRM **27.3**
- Style **Dry 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 **27.8 liter(s)**

Mash information

- Mash efficiency **95 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12.7 liter(s)**
- Total mash volume **16.9 liter(s)**

Steps

- Temp **66 C**, Time **60 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **15 min**

Mash step by step

- Heat up **12.7 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **15 min** at **72C**
- Keep mash **15 min** at **78C**
- Sparge using **19.3 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	2.5 kg (59.1%)	80 %	5
Grain	Monachijski	1 kg (23.6%)	80 %	16
Grain	Jęczmień palony	0.3 kg (7.1%)	55 %	985
Grain	Weyermann - Pszeniczny Czekoladowy	0.23 kg (5.4%)	73 %	1001
Grain	Płatki owsiane	0.2 kg (4.7%)	85 %	3

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	35 g	60 min	9.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
FM54 Gorączka kalifornijska	Ale	Slant	100 ml	Fermentum Mobile

Extras

Type	Name	Amount	Use for	Time
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Water Agent	węglan wapnia	15 g	Mash	60 min
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