

# Simple Stout

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **36**
- SRM **29.2**
- Style **Dry Stout**

## Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22.1 liter(s)**
- Boil time **80 min**
- Evaporation rate **12 %/h**
- Boil size **29.2 liter(s)**

## Mash information

- Mash efficiency **76 %**
- Liquor-to-grist ratio **5.5 liter(s) / kg**
- Mash size **28 liter(s)**
- Total mash volume **33.1 liter(s)**

## Steps

- Temp **65 C**, Time **90 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **28 liter(s)** of strike water to **69.1C**
- Add grains
- Keep mash **90 min** at **65C**
- Keep mash **20 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **6.3 liter(s)** of **76C** water or to achieve **29.2 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Malteurop MepPilsner	3.5 kg (68.6%)	83 %	4
Grain	Płatki jęczmienne błyskawiczne	1 kg (19.6%)	85 %	3
Grain	Jęczmień palony	0.6 kg (11.8%)	55 %	985

## Hops

Use for	Name	Amount	Time	Alpha acid
First Wort	Sybilla	45 g	60 min	7 %

## Yeasts

Name	Type	Form	Amount	Laboratory
FM10 O czym szumią wierzby	Ale	Liquid	120 ml	Fermentum Mobile

## Notes

- Ca=51, Mg=10, Na=16, Cl=71, S04=71  
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