

belgian stout

- Gravity **11 BLG**
- ABV **4.4 %**
- IBU **31**
- SRM **18.6**
- Style **Belgian Specialty Ale**

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 **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **14.3 liter(s)**
- Total mash volume **19 liter(s)**

Steps

- Temp **66 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **14.3 liter(s)** of strike water to **73.6C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **10 min** at **78C**
- Sparge using **18.3 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	3 kg (63.2%)	80 %	5
Grain	Pszeniczny	1 kg (21.1%)	85 %	4
Grain	Carabelge	0.5 kg (10.5%)	80 %	30
Grain	Strzegom Czekoladowy ciemny	0.15 kg (3.2%)	68 %	1200
Grain	Jęczmień palony	0.1 kg (2.1%)	55 %	985

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnat	30 g	60 min	9.8 %

Yeasts

Name	Type	Form	Amount	Laboratory
FM21 Odkrycie sezonu	Ale	Slant	200 ml	Fermentum Mobile

Extras

Type	Name	Amount	Use for	Time
Spice	kolendera	10 g	Boil	5 min

Spice	extrat waniliowy	1 g	Boil	5 min
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