

# 1 stout

- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **36**
- SRM **35.6**
- Style **Dry Stout**

## Batch size

- Expected quantity of finished beer **8 liter(s)**
- Trub loss **5 %**
- Size with trub loss **8.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **10.1 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **5.3 liter(s)**
- Total mash volume **7.3 liter(s)**

## Steps

- Temp **72 C**, Time **60 min**

## Mash step by step

- Heat up **5.3 liter(s)** of strike water to **82.3C**
- Add grains
- Keep mash **60 min** at **72C**
- Sparge using **6.9 liter(s)** of **76C** water or to achieve **10.1 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	1.25 kg (59.5%)	80 %	5
Grain	Viking Munich Malt	0.5 kg (23.8%)	78 %	24
Grain	Strzegom Czekoladowy ciemny	0.15 kg (7.1%)	68 %	1200
Grain	Płatki owsiane	0.1 kg (4.8%)	60 %	3
Grain	Jęczmień palony	0.1 kg (4.8%)	55 %	985

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Centennial	8 g	55 min	10.5 %
Boil	Centennial	7 g	25 min	10.5 %
Aroma (end of boil)	Centennial	10 g	0 min	10.5 %
Dry Hop	Centennial	25 g	3 day(s)	10.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Slant	200 ml	Fermentis