

# Stout

- Gravity **14.7 BLG**
- ABV **6.1 %**
- IBU **34**
- SRM **34.5**
- Style **Dry Stout**

## Batch size

- Expected quantity of finished beer **50 liter(s)**
- Trub loss **10 %**
- Size with trub loss **55 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **63.3 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **41.1 liter(s)**
- Total mash volume **54.8 liter(s)**

## Steps

- Temp **68 C**, Time **60 min**

## Mash step by step

- Heat up **41.1 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Sparge using **35.9 liter(s)** of **76C** water or to achieve **63.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pale	8 kg (58.4%)	80 %	4
Grain	Caraaroma	0.5 kg (3.6%)	78 %	400
Grain	Strzegom Czekoladowy 1200	0.4 kg (2.9%)	68 %	1202
Grain	Caramunich® typ I	0.8 kg (5.8%)	73 %	80
Grain	Strzegom Czekoladowy jasny	1 kg (7.3%)	68 %	400
Grain	Strzegom Wiedeński	2 kg (14.6%)	79 %	10
Grain	Jęczmień palony	0.5 kg (3.6%)	55 %	985
Grain	Płatki owsiane	0.5 kg (3.6%)	85 %	3

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	hallertauer taurus	80 g	40 min	10.5 %
Aroma (end of boil)	Rakau (NZ)	30 g	5 min	10 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11 g	Safale