

# Stout 11

- Gravity **12.1 BLG**
- ABV ---
- IBU **36**
- SRM **34.1**
- Style **Dry Stout**

## Batch size

- Expected quantity of finished beer **45 liter(s)**
- Trub loss **5 %**
- Size with trub loss **47.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **7 %/h**
- Boil size **55.4 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **25.2 liter(s)**
- Total mash volume **33.6 liter(s)**

## Steps

- Temp **65 C**, Time **45 min**
- Temp **70 C**, Time **30 min**
- Temp **78 C**, Time **1 min**

## Mash step by step

- Heat up **25.2 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **45 min** at **65C**
- Keep mash **30 min** at **70C**
- Keep mash **1 min** at **78C**
- Sparge using **38.6 liter(s)** of **76C** water or to achieve **55.4 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	7 kg (70.7%)	79 %	6
Grain	Weyermann - Chocolate Wheat	0.5 kg (5.1%)	74 %	788
Grain	Weyermann - Chocolate Rye	0.5 kg (5.1%)	20 %	493
Grain	Jęczmień palony	0.2 kg (2%)	55 %	985
Adjunct	Płatki owsiane	0.5 kg (5.1%)	60 %	6
Adjunct	Płatki jęczmienne	0.5 kg (5.1%)	60 %	7
Adjunct	płatki żytnie	0.5 kg (5.1%)	60 %	5
Grain	Strzegom Monachijski typ I	0.2 kg (2%)	79 %	16

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	magnum	50 g	45 min	12 %
Aroma (end of boil)	Willamette	50 g	15 min	5 %

## Yeasts

<b>Name</b>	<b>Type</b>	<b>Form</b>	<b>Amount</b>	<b>Laboratory</b>
Safale S-04	Ale	Dry	20 g	Safale