

## Dry stout

- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **36**
- SRM **35.8**
- Style **Dry Stout**

### Batch size

- Expected quantity of finished beer **45 liter(s)**
- Trub loss **5 %**
- Size with trub loss **48.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **7 %/h**
- Boil size **53.9 liter(s)**

### Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **29.9 liter(s)**
- Total mash volume **39.8 liter(s)**

### Steps

- Temp **68 C**, Time **60 min**
- Temp **78 C**, Time **1 min**

### Mash step by step

- Heat up **29.9 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **1 min** at **78C**
- Sparge using **34 liter(s)** of **76C** water or to achieve **53.9 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	7 kg (63.9%)	79 %	6
Grain	Weyermann - Chocolate Wheat	0.15 kg (1.4%)	74 %	788
Grain	Weyermann - Chocolate Rye	0.5 kg (4.6%)	50 %	493
Adjunct	Płatki owsiane	0.4 kg (3.7%)	60 %	6
Grain	Płatki pszeniczne	0.5 kg (4.6%)	85 %	3
Adjunct	płatki żytnie	0.6 kg (5.5%)	60 %	5
Grain	Fawcett - Pale Chocolate	1 kg (9.1%)	71 %	600
Grain	Castle Cafe	0.5 kg (4.6%)	75.5 %	480
Grain	Strzegom Barwiący	0.3 kg (2.7%)	68 %	1300

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	40 g	60 min	13.5 %
Boil	East Kent Goldings	50 g	30 min	5.1 %

### Yeasts

Name	Type	Form	Amount	Laboratory
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Safale S-04	Ale	Dry	20 g	Safale
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