

# Stout

- Gravity **14.3 BLG**
- ABV **5.9 %**
- IBU **30**
- SRM **35.7**
- Style **Dry Stout**

## Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **18 %/h**
- Boil size **32.6 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **21 liter(s)**
- Total mash volume **28 liter(s)**

## Steps

- Temp **69 C**, Time **90 min**
- Temp **72 C**, Time **10 min**

## Mash step by step

- Heat up **21 liter(s)** of strike water to **77.2C**
- Add grains
- Keep mash **90 min** at **69C**
- Keep mash **10 min** at **72C**
- Sparge using **18.6 liter(s)** of **76C** water or to achieve **32.6 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	3.5 kg (50%)	79 %	6
Grain	Płatki owsiane	0.8 kg (11.4%)	60 %	3
Grain	Strzegom Monachijski typ I	0.5 kg (7.1%)	79 %	16
Grain	Jęczmień palony	0.4 kg (5.7%)	55 %	985
Grain	Briess - Dark Chocolate Malt	0.2 kg (2.9%)	60 %	1100
Grain	Strzegom Pilzneński	1 kg (14.3%)	80 %	4
Grain	Brown Malt (British Chocolate)	0.3 kg (4.3%)	70 %	128
Grain	Briess - Chocolate Malt	0.3 kg (4.3%)	60 %	690

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	35 g	60 min	10 %
Aroma (end of boil)	Lublin (Lubelski)	15 g	0 min	4 %

## Yeasts

Name	Type	Form	Amount	Laboratory
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Mangrove Jack's M42 New World Strong Ale	Ale	Dry	11.5 g	Mangrove Jack's
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