

# Dry Stout na Klarstein'ie

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **34**
- SRM **29.1**
- Style **Dry Stout**

## Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.6 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.8 liter(s) / kg**
- Mash size **18.2 liter(s)**
- Total mash volume **23 liter(s)**

## Steps

- Temp **62 C**, Time **70 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **2 min**

## Mash step by step

- Heat up **18.2 liter(s)** of strike water to **67.5C**
- Add grains
- Keep mash **70 min** at **62C**
- Keep mash **10 min** at **72C**
- Keep mash **2 min** at **78C**
- Sparge using **13.2 liter(s)** of **76C** water or to achieve **26.6 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	3 kg (62.5%)	80 %	5
Grain	Strzegom Czekoladowy jasny	0.5 kg (10.4%)	68 %	400
Grain	Jęczmień palony	0.15 kg (3.1%)	55 %	985
Grain	Strzegom Monachijski typ II	1 kg (20.8%)	79 %	22
Grain	Strzegom Barwiący	0.15 kg (3.1%)	68 %	1300

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Lublin (Lubelski)	28 g	60 min	5.4 %
Boil	Marynka	30 g	20 min	9.1 %

## Yeasts

Name	Type	Form	Amount	Laboratory
us-05	Ale	Dry	12 g	us