

# Stout Festiwalowy

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **41**
- SRM **31.3**
- Style **Dry Stout**

## Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **5 %**
- Size with trub loss **15.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **19 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **9.5 liter(s)**
- Total mash volume **13.3 liter(s)**

## Steps

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

## Mash step by step

- Heat up **9.5 liter(s)** of strike water to **77.6C**
- Add grains
- Keep mash **60 min** at **68C**
- Sparge using **13.3 liter(s)** of **76C** water or to achieve **19 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	2.5 kg (65.8%)	80 %	5
Grain	Monachijski typ II 20-25 EBC Weyermann	0.8 kg (21.1%)	80 %	20
Grain	Czekoladowy	0.3 kg (7.9%)	60 %	788
Grain	Jęczmień palony	0.2 kg (5.3%)	55 %	985

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	20 g	60 min	10 %
Boil	Hallertau Blanc	20 g	10 min	11 %
Boil	Tettnang	20 g	0 min	4 %

## Yeasts

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