

# Stout konkursowy

- Gravity **10.5 BLG**
- ABV **4.2 %**
- IBU **31**
- SRM **29.5**
- 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 **70 min**
- Evaporation rate **10 %/h**
- Boil size **19.3 liter(s)**

## Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **8.6 liter(s)**
- Total mash volume **11.5 liter(s)**

## Steps

- Temp **66 C**, Time **60 min**
- Temp **76 C**, Time **5 min**

## Mash step by step

- Heat up **8.6 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **5 min** at **76C**
- Sparge using **13.6 liter(s)** of **76C** water or to achieve **19.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	2.06 kg (71.5%)	80 %	5
Grain	Barley, Flaked	0.38 kg (13.2%)	70 %	4
Grain	Strzegom Karmel 150	0.11 kg (3.8%)	75 %	150
Grain	Jęczmień palony	0.22 kg (7.6%)	55 %	1300
Grain	Fawcett - Pszeniczny Czekoladowy	0.11 kg (3.8%)	73 %	1001

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	12 g	60 min	13.5 %
Boil	Challenger	8 g	20 min	7 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	4.5 g	Safale