

# Wytrawny Wróbel - Dry Stout

- Gravity **9.5 BLG**
- ABV **3.7 %**
- IBU **12**
- SRM **23.4**
- Style **Dry Stout**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **70 min**
- Evaporation rate **5 %/h**
- Boil size **24.3 liter(s)**

## Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3.4 liter(s) / kg**
- Mash size **13.9 liter(s)**
- Total mash volume **18 liter(s)**

## Steps

- Temp **67 C**, Time **60 min**
- Temp **76 C**, Time **0 min**

## Mash step by step

- Heat up **13.9 liter(s)** of strike water to **73.9C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **0 min** at **76C**
- Sparge using **14.5 liter(s)** of **76C** water or to achieve **24.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pale Ale Malt	3.2 kg (78%)	85 %	7
Grain	Carafa II	0.1 kg (2.4%)	70 %	812
Grain	Jęczmień palony	0.3 kg (7.3%)	55 %	985
Grain	Płatki jęczmienne błyskawiczne	0.5 kg (12.2%)	50 %	1

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	English Golding	15 g	60 min	4.7 %
Boil	English Golding	15 g	10 min	4.7 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11.5 g	Fermentis