

# Hafe weizen wytrawny na 24 l z przerwą ferulikową pale ale

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **18**
- SRM **5.1**
- Style **Weizen/Weissbier**

## Batch size

- Expected quantity of finished beer **24 liter(s)**
- Trub loss **5 %**
- Size with trub loss **25.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **31.9 liter(s)**

## Mash information

- Mash efficiency **64 %**
- Liquor-to-grist ratio **3.3 liter(s) / kg**
- Mash size **23.1 liter(s)**
- Total mash volume **30.1 liter(s)**

## Steps

- Temp **44 C**, Time **25 min**
- Temp **64 C**, Time **45 min**
- Temp **72 C**, Time **15 min**
- Temp **77 C**, Time **5 min**

## Mash step by step

- Heat up **23.1 liter(s)** of strike water to **47.6C**
- Add grains
- Keep mash **25 min** at **44C**
- Keep mash **45 min** at **64C**
- Keep mash **15 min** at **72C**
- Keep mash **5 min** at **77C**
- Sparge using **15.8 liter(s)** of **76C** water or to achieve **31.9 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	3 kg (42.9%)	80 %	4
Grain	Pszeniczny	3 kg (42.9%)	85 %	4
Grain	Melanoiden Malt	0.5 kg (7.1%)	80 %	39
Grain	Płatki pszeniczne	0.5 kg (7.1%)	85 %	3

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Saaz (Czech Republic)	30 g	60 min	4.5 %
Boil	Saaz (Czech Republic)	30 g	20 min	3.7 %

## Yeasts

Name	Type	Form	Amount	Laboratory
FM41 Gwoździe i Banany	Wheat	Slant	300 ml	Fermentum Mobile