

# Brązowa półpszenica

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **16**
- SRM **14.4**
- Style **Dunkelweizen**

## Batch size

- Expected quantity of finished beer **50 liter(s)**
- Trub loss **5 %**
- Size with trub loss **52.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **63.3 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **36.9 liter(s)**
- Total mash volume **49.2 liter(s)**

## Steps

- Temp **48 C**, Time **5 min**
- Temp **67 C**, Time **45 min**
- Temp **74 C**, Time **20 min**

## Mash step by step

- Heat up **36.9 liter(s)** of strike water to **52.7C**
- Add grains
- Keep mash **5 min** at **48C**
- Keep mash **45 min** at **67C**
- Keep mash **20 min** at **74C**
- Sparge using **38.7 liter(s)** of **76C** water or to achieve **63.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pszeniczny	6 kg (48.8%)	85 %	4
Grain	Briess - Pilsen Malt	2.5 kg (20.3%)	80.5 %	2
Grain	Strzegom Monachijski typ II	2 kg (16.3%)	79 %	22
Grain	Carahell	1 kg (8.1%)	77 %	26
Grain	Special B Malt	0.6 kg (4.9%)	65.2 %	315
Grain	Jęczmień palony	0.2 kg (1.6%)	55 %	985

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	35 g	60 min	8.8 %
Whirlpool	Zula	20 g	20 min	9.7 %

## Yeasts

Name	Type	Form	Amount	Laboratory
WLP300 - Hefeweizen Ale Yeast	Wheat	Slant	280 ml	---