

PILS BEER ZAKARCZMIE

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU ---
- SRM **3.7**
- Style **German Pilsner (Pils)**

Batch size

- Expected quantity of finished beer **550 liter(s)**
- Trub loss **5 %**
- Size with trub loss **577.5 liter(s)**
- Boil time **70 min**
- Evaporation rate **8 %/h**
- Boil size **691.5 liter(s)**

Mash information

- Mash efficiency **90 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **312 liter(s)**
- Total mash volume **416 liter(s)**

Steps

- Temp **50 C**, Time **30 min**
- Temp **64 C**, Time **30 min**
- Temp **70 C**, Time **30 min**
- Temp **76 C**, Time **5 min**

Mash step by step

- Heat up **312 liter(s)** of strike water to **55C**
- Add grains
- Keep mash **30 min** at **50C**
- Keep mash **30 min** at **64C**
- Keep mash **30 min** at **70C**
- Keep mash **5 min** at **76C**
- Sparge using **483.5 liter(s)** of **76C** water or to achieve **691.5 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	95 kg (91.3%)	85 %	4
Grain	Cara-Pils/Dextrine	5 kg (4.8%)	85 %	4
Grain	Monachijski	2 kg (1.9%)	85 %	16
Grain	Caramunich® typ I	2 kg (1.9%)	85 %	80

Hops

Use for	Name	Amount	Time	Alpha acid
Mash	Hallertau Mittelfruh	1000 g	30 min	3 %
Mash	Hallertau Mittelfruh	300 g	75 min	3 %
Mash	Hallertau Mittelfruh	600 g	85 min	3 %

Yeasts

Name	Type	Form	Amount	Laboratory
w34/70	Lager	Dry	500 g	---