

Jasne

- Gravity **8.8 BLG**
- ABV **3.4 %**
- IBU **25**
- SRM **4.1**
- Style **German Pilsner (Pils)**

Batch size

- Expected quantity of finished beer **55 liter(s)**
- Trub loss **5 %**
- Size with trub loss **57.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **69.6 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **28.5 liter(s)**
- Total mash volume **38 liter(s)**

Steps

- Temp **64 C**, Time **15 min**
- Temp **72 C**, Time **45 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **28.5 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **15 min** at **64C**
- Keep mash **45 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **50.6 liter(s)** of **76C** water or to achieve **69.6 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	7 kg (73.7%)	80 %	4
Grain	Strzegom Monachijski typ II	2 kg (21.1%)	79 %	22
Grain	Caramel pale	0.25 kg (2.6%)	70 %	7
Grain	Weyermann pszeniczny jasny	0.25 kg (2.6%)	80 %	6

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	55 g	60 min	8.8 %
Boil	Saaz (Czech Republic)	50 g	5 min	4 %
Boil	Styrian Golding	25 g	5 min	4 %