

Pils

- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **63**
- SRM **4.5**
- Style **German Pilsner (Pils)**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **20 liter(s)**

Steps

- Temp **50 C**, Time **10 min**
- Temp **63 C**, Time **30 min**
- Temp **68 C**, Time **40 min**

Mash step by step

- Heat up **15 liter(s)** of strike water to **55C**
- Add grains
- Keep mash **10 min** at **50C**
- Keep mash **30 min** at **63C**
- Keep mash **40 min** at **68C**
- Sparge using **15.3 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pilsner malt	4 kg (80%)	82 %	4
Grain	Strzegom Monachijski typ II	0.5 kg (10%)	79 %	22
Grain	Carabody Viking Malt	0.3 kg (6%)	76 %	6
Grain	Dextrin - Crisp	0.2 kg (4%)	80 %	2.8

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Citra	20 g	60 min	14.2 %
Boil	Citra	20 g	30 min	14.2 %
Boil	Citra	10 g	15 min	14.2 %
Aroma (end of boil)	Wai-iti	50 g	0 min	2.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
W-34/70	Lager	Dry	22 g	Saflager