

pils

- Gravity **13.8 BLG**
- ABV **5.7 %**
- IBU **35**
- SRM **8.2**
- Style **Classic American Pilsner**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **26.4 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **18.9 liter(s)**
- Total mash volume **24.3 liter(s)**

Steps

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

Mash step by step

- Heat up **18.9 liter(s)** of strike water to **54.3C**
- Add grains
- Keep mash **30 min** at **50C**
- Keep mash **30 min** at **64C**
- Keep mash **30 min** at **70C**
- Sparge using **12.9 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pilsner malt	5 kg (92.6%)	82 %	4
Grain	Strzegom Karmel 150	0.4 kg (7.4%)	75 %	150

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	35 g	60 min	8 %
Whirlpool	Saaz (USA)	20 g	15 min	3.75 %
Aroma (end of boil)	Mosaic	20 g	5 min	10 %

Yeasts

Name	Type	Form	Amount	Laboratory
Saflager W 34/70	Lager	Slant	10 ml	Fermentis