

German pils BUNKIER

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **32**
- SRM **4.1**
- Style **German Pilsner (Pils)**

Batch size

- Expected quantity of finished beer **60 liter(s)**
- Trub loss **5 %**
- Size with trub loss **63 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **75.9 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **43.7 liter(s)**
- Total mash volume **58.2 liter(s)**

Steps

- Temp **50 C**, Time **10 min**
- Temp **62 C**, Time **30 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **43.7 liter(s)** of strike water to **55C**
- Add grains
- Keep mash **10 min** at **50C**
- Keep mash **30 min** at **62C**
- Keep mash **15 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **46.8 liter(s)** of **76C** water or to achieve **75.9 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pilsner malt	11 kg (75.6%)	82 %	4
Grain	Viking Vienna Malt	2 kg (13.7%)	79 %	7
Grain	Weyermann - Light Munich Malt	1 kg (6.9%)	82 %	14
Grain	Briess - Rye Malt	0.05 kg (0.3%)	80 %	7
Grain	Platki owsiane	0.5 kg (3.4%)	85 %	3

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Saaz (Czech Republic)	150 g	60 min	4.5 %
Boil	Saaz (Czech Republic)	50 g	15 min	4.5 %
Boil	Saaz (Czech Republic)	50 g	5 min	4.5 %
Boil	East Kent Goldings	50 g	5 min	5.1 %

Yeasts

Name	Type	Form	Amount	Laboratory
Saflager S-23	Lager	Dry	60 g	Fermentis Division of S.I.Lesaffre