

## pils 3

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- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **41**
- SRM **4.8**
- 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 **62 C**, Time **40 min**
- Temp **72 C**, Time **20 min**

### Mash step by step

- Heat up **15 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **40 min** at **62C**
- Keep mash **20 min** at **72C**
- 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 Pale Ale malt	1 kg (20%)	80 %	5
Grain	Strzegom Pilzneński	3 kg (60%)	80 %	4
Grain	Strzegom Monachijski typ I	1 kg (20%)	79 %	16

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Lunga	15 g	60 min	11.5 %
Boil	Lunga	15 g	30 min	11.5 %
Boil	Motueka	25 g	15 min	5.4 %
Aroma (end of boil)	Motueka	25 g	0 min	5.4 %

### Yeasts

Name	Type	Form	Amount	Laboratory
gozdawa GLW35	Lager	Dry	10 g	---