

## NW Pils

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **32**
- SRM **3.6**
- Style **German Pilsner (Pils)**

### Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **29.5 liter(s)**

### Mash information

- Mash efficiency **82 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **17.8 liter(s)**
- Total mash volume **22.9 liter(s)**

### Steps

- Temp **63 C**, Time **30 min**
- Temp **72 C**, Time **45 min**
- Temp **78 C**, Time **0 min**

### Mash step by step

- Heat up **17.8 liter(s)** of strike water to **69.2C**
- Add grains
- Keep mash **30 min** at **63C**
- Keep mash **45 min** at **72C**
- Keep mash **0 min** at **78C**
- Sparge using **16.8 liter(s)** of **76C** water or to achieve **29.5 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pilsner malt	5 kg (98%)	82 %	4
Grain	Karmelowy Jasny 30EBC	0.1 kg (2%)	75 %	30

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Enigma (AUS)	10 g	60 min	16.9 %
Boil	Vic Secret	5 g	60 min	19.2 %
Whirlpool	Enigma (AUS)	10 g	15 min	17.2 %
Whirlpool	Vic Secret	5 g	15 min	19.2 %
Dry Hop	Enigma (AUS)	10 g	3 day(s)	16.9 %
Dry Hop	Vic Secret	20 g	3 day(s)	19.2 %
Dry Hop	Zythos	30 g	3 day(s)	9.2 %

### Yeasts

Name	Type	Form	Amount	Laboratory
FM31 Bawarska Dolina	Lager	Liquid	100 ml	Fermentum Mobile