

polski pils

- Gravity **10.5 BLG**
- ABV **4.2 %**
- IBU **36**
- SRM **3.2**
- Style **German Pilsner (Pils)**

Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.2 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **30.4 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **14.3 liter(s)**
- Total mash volume **19 liter(s)**

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzniejszy	4 kg (84.2%)	81 %	4
Grain	Weyermann - Carapils	0.5 kg (10.5%)	78 %	4
Grain	zakwaszający	0.25 kg (5.3%)	--- %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Oktawia	15 g	60 min	7.8 %
Boil	Marynka	15 g	45 min	9.5 %
Boil	Lublin (Lubelski)	15 g	30 min	4 %
Boil	Oktawia	5 g	15 min	7.1 %
Boil	Marynka	5 g	15 min	10 %
Boil	Lublin (Lubelski)	5 g	15 min	4 %
Whirlpool	Oktawia	10 g	0 min	7.1 %
Whirlpool	Marynka	10 g	0 min	10 %
Whirlpool	Lublin (Lubelski)	10 g	0 min	4 %
Dry Hop	Oktawia	50 g	3 day(s)	7.1 %

Yeasts

Name	Type	Form	Amount	Laboratory
FM31 Bawarska Dolina	Lager	Liquid	120 ml	Fermentum Mobile