

pils polski

- Gravity **10.7 BLG**
- ABV **4.3 %**
- IBU **36**
- SRM **4.3**
- 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 **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12 liter(s)**
- Total mash volume **16 liter(s)**

Steps

- Temp **52 C**, Time **10 min**
- Temp **65 C**, Time **50 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **12 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **50 min** at **65C**
- Keep mash **5 min** at **78C**
- Sparge using **17.3 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	3 kg (75%)	80 %	4
Grain	Strzegom Monachijski typ I	1 kg (25%)	79 %	16

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Chinook	20 g	60 min	13 %
Boil	Cascade PL	25 g	10 min	5.2 %

Yeasts

Name	Type	Form	Amount	Laboratory
Drożdże Gozdawa W 34/70	Lager	Dry	10 g	---